The American Artisan
And Hardware Record

Vol. 51. No. 16. CHICAGO, APRIL 21, 1906. $2.00 Per Year.

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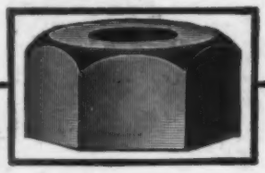
COLUMBUS BOLT WORKS,
COLUMBUS, OHIO.
Bolts, Rivets, Nuts, Washers, Carriage Forgings, Etc.
CATALOG AND PRICES ON APPLICATION.

The Sun Always Shines
Upon the house where
"American Seal" Elastic Oil Cement
has been used
Strengthens Weak Spots and Stops Leaks
THE PRICE IS RIGHT!
For bedding slate and tile Roofs — The best to be had
The Wm. Connors Paint Mfg. Company
Troy, N. Y.

TRYING to do business without advertising is like winking at a girl in the dark: you know what you are doing but nobody else does.

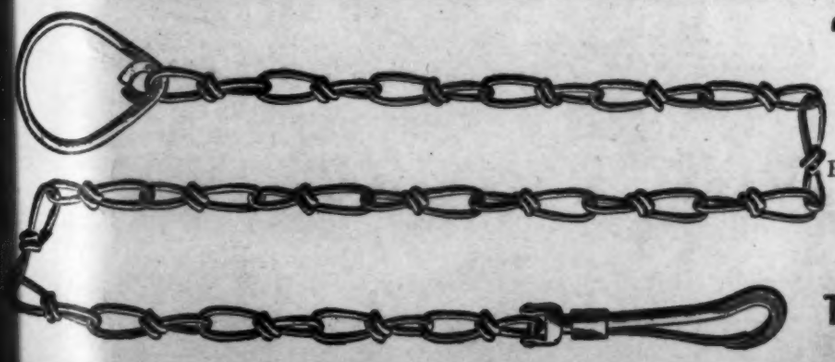
THE WIZARD
Adjustable Flexible Hanger.
The only Adjustable Hinge Hanger on market. Boiler Plate Steel Frame. Door Plate and Sliding Link Best Trade Malleable Iron.

STEEL ROLLER BEARINGS
Safety Door Hanger Co.
Ashland, Ohio. Hamilton, Ont.



COLD PUNCHED
NUTS
HIGH GRADE
GOOD LOOKING
ACCURATE
SEMI-FINISHED
NUTS
Garland Nut & Rivet Co.
PITTSBURGH, PA.

BLACK DIAMOND FILES and RASPS
TRADE MARK
PERFECT—ALWAYS
Twelve Medals Awarded at International Expositions
Copy of Catalogue will be sent free to any interested file user upon application.
G. & H. BARNETT COMPANY
Black Diamond File Works PHILADELPHIA



"BROWN"
TIE-OUT CHAINS
Fitted with Stake Ring, a Swivel every ten feet, and a Swivel Snap.
A FREE SAMPLE WILL TELL THE STORY.
The BRIDGEPORT CHAIN CO.
BRIDGEPORT, CONN.

Now made with wide polished nickel screen foot rails hiding Fire Pot.

PRICES FOR MAY:

No. 160—	Cast	Body	$18.00
No. 180—	"	"	20.40
No. 16—	"	"	16.20
No. 18—	"	"	18 60

5% Cash.

Freight allowed to most places. Orders booked now for later shipment.

"This Stove Attends to Its Own Business."

The Tremont Soft Coal Self Feeder

(PATENTED)

Successful for more than 10 years.

This wonderful stove Has, Does and Will successfully feed and burn the dirtiest and meanest soft coal ever mined.

This stove is a perfect success with the kinds of soft coal that are full of gas—that get spongy and that "swell up and bust."

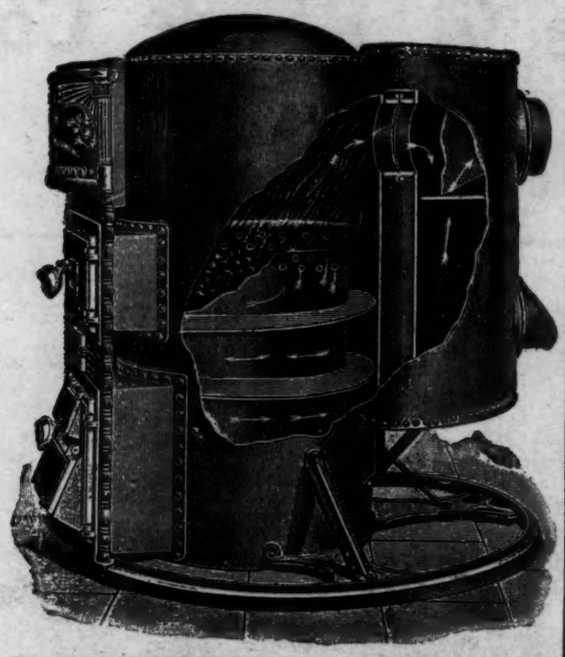
The Tremont Soft Coal Self-Feeder is as simple as any stove that you have ever seen. Anybody that can cut kindling, lift a coal hod and strike a match can run it.

If you are a little suspicious of Soft Coal Self-Feeding Stoves—we don't blame you—for you may have been "fooled" by some of the "complicated affairs" that can only be operated by their inventors.

All that we ask is an opportunity to prove our claims—and nothing else will clinch our arguments like having you test the stove yourself. Will you do it?

Pittsburgh Stove & Range Co.

Pittsburgh, Pa.



The WEIR

Twenty-three Sizes

Five Styles

All Gas and Soot Consuming

Furnaces

Why is the Weir the

Best, Most Economical, Most Durable?

WHY DOES IT PAY?

Our Catalogue Tells WHY?

The WEIR

Meyer Furnace Co.

Peoria, Illinois

Art St. Clair Base Burner

13 inch, 15 inch and 17 inch sizes

A strictly high-grade double-heating base burner, of new and elegant design, with large self-feed attachment.
Ornamentation is highly artistic.
Powerful double-heating attachment.
Massive in appearance and durable.
Large removable deflector top.
Gas tight automatic cover over magazine.
Improved duplex grate, with shaking ring.

Roomy Tea Kettle Attachment
Large Square Bailed Ash Pan

Mica lights extending the full length of the fire chamber, with large deflectors on all three sides. Removable heavy fire-pot through front lower mica door frame. Brass nuts at all places that are liable to be replaced or removed at any time.

Nickeled parts are copperized first and highly polished and nickeled on copper, which insures highest finish and durable nickeling. Mounting is tight and perfect in every respect.

Belleville Stove & Range Co.

BELLEVILLE, ILLINOIS

Write for our latest catalogue

Malleable St. Clair Steel Range

16 inch and 18 inch ovens.
Polished Steel Bodies.
Sectional Top Plates.
Polished Tops.
Highly Nickeled.
Can furnish any combination desired.
Strictly High Grade in every respect.

VAN'S RANGE

Patent Improved Wrought Steel Portable

For Hotels, Restaurants. Public Institutions, Boarding Houses, and Private Families. All kinds of Hotel Implements for culinary purposes. Manufactured and for sale by

The John Van Range Company

Southwest Corner
5th and Broadway

CINCINNATI, - - - - - OHIO

The House Warming Manual

Is beyond all doubt the best book published on practical house heating. It contains the plans and essays on heating a house submitted in THE AMERICAN ARTISAN House Warming Competition for $300.00 prizes, and is in fact

An Encyclopedia of the Most Modern and Improved Practical Methods of Heating a House by Steam, Hot Water and Warm Air.

A Leading Western Newspaper says

"The volume is a well-bound and artistically printed and illustrated volume of nearly 300 pages, and contains some masterly essays on steam heating, hot water heating and warm air heating. Nearly every prominent authority in this field is quoted, and an application of principles and improvements suggested covers all technical details in a simplified and practical way. House plans and diagrams accompany the subject matter which deals specifically with radiation, combustion, ventilation, prices, estimates and the best and latest methods for placing, connecting and utilizing the apparatus adopted."

Price, Only $3.50 Per Copy.

For sale by all booksellers or the Publisher

DANIEL STERN, 69 Dearborn St., Chicago.

YOU CANNOT MAKE A MISTAKE

If you buy the justly celebrated

Peoria Lexington Steel Ranges

15, 17, 19 and 21 inch Oven.

The Acme of Perfection in

Family Steel Ranges

MADE OF

Best Anti-Rust Planished Steel.

Best grades of Pig Iron.
Perfect Baker and Fuel Savers.
Very Attractive in Appearance.

Sure Trade Winners

Culter & Proctor Stove Co.

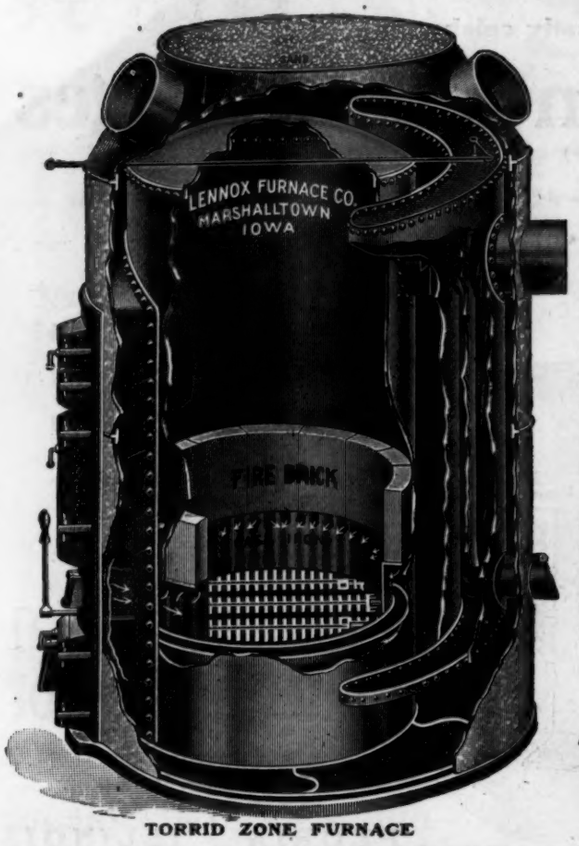
PEORIA ILLINOIS

Schill's New Idea furnace has done more to popularize the system of hot air heating than any other man or product.

The
Schill Brothers Company
CRESTLINE, OHIO

Makers of Oak Stoves, Steel Ranges, Cast Ranges and Similar Products

BE MODERN—SELL STEEL FURNACES



TORRID ZONE FURNACE

They are easier to sell because the people want them. The people want them because **Lennox Torrid Zone** steel furnaces have demonstrated that the steel furnace is the only scientific and perfect furnace made. In the first place the fire, smoke and gases are confined within a gas tight and smoke tight steel dome riveted like a steam boiler. You no longer have a bon-fire under your house smoking thru packed joints which loosen or cracked fire pots which always come sooner or later to cast iron furnaces.

The Lennox Company now has the largest factory in the world for making steel furnaces. Its Torrid Zone furnace is the leading furnace sold in the Canadian Northwest where powerful heaters are needed. The Torrid Zone has been the pioneer among steel furnaces and has created the demand now felt everywhere for steel furnaces.

There is not a packed joint of any kind about a Torrid Zone. Its indirect radiator connected by a special dovetailed collar nearly doubles the heating capacity of the furnace—Torrid Zones are simple to operate and as easy to set as a stove. They do not get out of order and cost less for repairs than any other furnace made.

Write for 40-page Catalog

The Lennox Furnace Co.

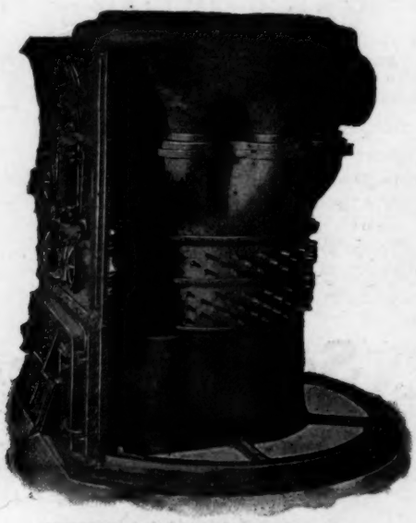
Marshalltown, Iowa.

JOHN KONTNY

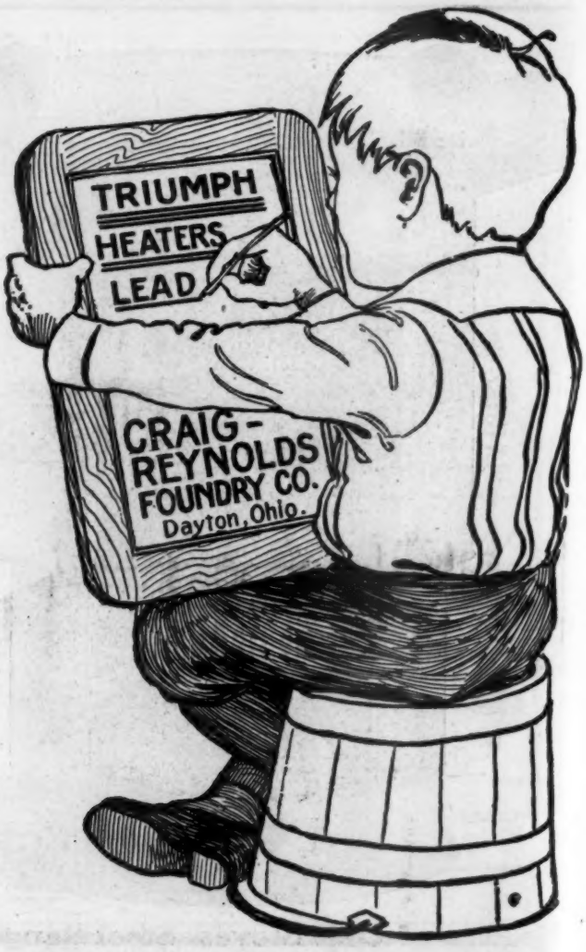
65-67 N. DESPLAINES ST.

CHICAGO

WESTERN AGENT

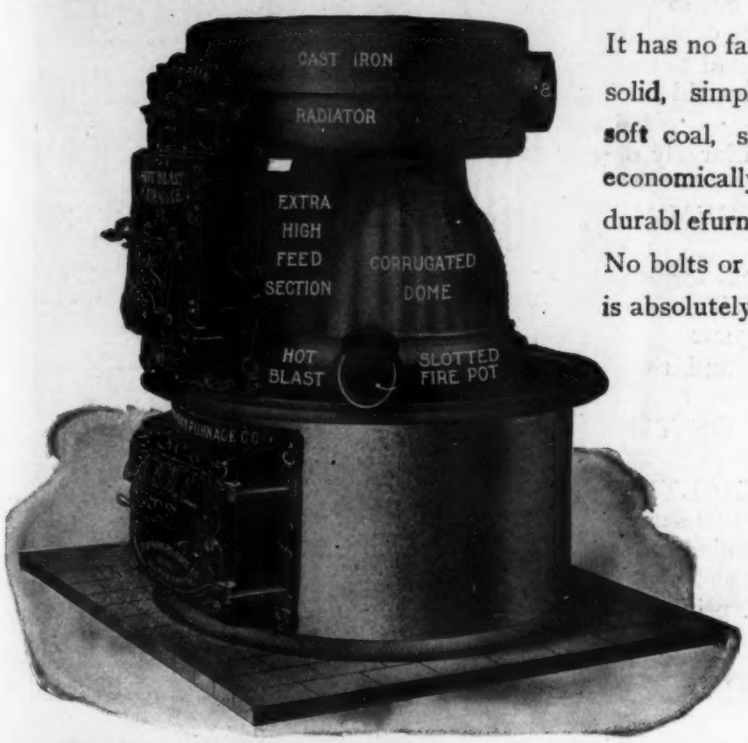


TRIUMPH KING FURNACE. Five Sizes. Hard or Soft Coal. Portable or Brick Set.



Robinson Hot Blast

Entirely New---Note the New Hot Blast Ring



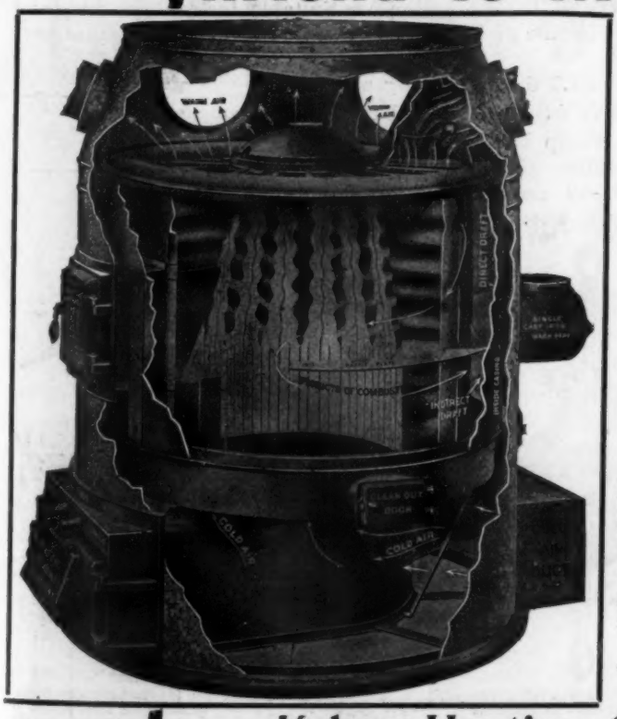
It has no fangdoodle features. Everything is solid, simple and sensible. It is made for soft coal, slack and lignite. It burns these economically and to good advantage. It is a durabl efurnace, made entirely of cast iron. No bolts or rods are exposed to the fire. It is absolutely gas tight.

Get Our New Catalog

Robinson Furnace Company

107-109 Lake Street, CHICAGO

Intend to Make a Change?



If, after several years of mighty hard work, you've found there's little money in Furnace jobs,—if you're dissatisfied with extreme competition and low prices,—we want to send you the Exclusive Agency Proposition for the KELSEY Generator.

The KELSEY Generator is *not* a furnace.

Any intending buyer of a heating system, after a few minutes investigation, quickly understands why the KELSEY is far better than any hot air furnace, or steam or hot water system.

It's easy to sell KELSEY Generators, because they are full of good, strong talking points,—and anyone interested in a heating system can see why the KELSEY gives *more* heat with the same fuel,—or the *same* heat with *less* fuel.

But let us send you our Proposition, and explain how we will help you go out after business.

We will point out how you can make a larger profit on every heating system you install,—and how you can quickly build up a prestige that will bring you the cream of the heating business in your locality.

Shall we send our proposition?

"There's only ONE Warm Air Generator"

Kelsey Heating Co., Syracuse, N. Y.

New York City, 156 FIFTH AVENUE

JAMES SMART MFG. CO., Brockville, Ont.
Sole Makers for Canada.

Western Sales Agents:
COOK & VAN EVERA COMPANY
38 East Lake Street, CHICAGO

Keep Out of the Line of Competition

An old and successful stove man says:

"As a rule, people do not start out to buy the poorest and cheapest stove they can find.

"Not one in fifty but would be glad to buy a GOOD STOVE if the dealer would ask them to do so.

"The stoves that are sold depend largely on the dealers' attitude toward them.

"IF HE WANTS TO SELL THEM HE DOES IT."

The above no doubt accounts for the LARGE SALES of RETORTS and SPECIAL RETORTS by our agents.

The PROFITS ARE GOOD, and there are NONE TO INTERFERE.

OUR FRIENDS ARE OUT OF THE LINE OF COMPETITION.

With the greatest line of SPECIALTIES in the country behind them, they feel safe in going forward and establishing a trade, knowing they will be PROTECTED.

Then; why not ask for catalogue, prices and territory?

MARION STOVE CO.

MARION, INDIANA

WE BELIEVE THAT ANY MERCHANT will make more money and have better satisfied customers by selling the best MADE GOODS he can buy, especially if the best do not cost a great deal, if any more, than an inferior make.

For over thirty years we have been making the NOVELTY Force Pump. Suitable for wells or cisterns. A few of our competitors have attempted to imitate the handle of the Novelty, but none of these imitations work as perfectly as the Novelty.

No. 13. House Pump.

Every part of the NOVELTY is interchangeable.

All cylinders are HEAVY SEAMLESS BRASS.

The base of our Well Pump is adjustable, and patented Handle is wood and adjustable.

For Strength, Durability and ease of operation, the NOVELTY leads all other makes.

Novelty 3-Way Valve. Can be attached to any make pump. Having iron pipe.

No. 19. Bucket Spray Pump we also make spray pumps to be used with tanks or barrels

THE HESS-SNYDER COMPANY, Manufacturers, Massillon, Ohio

Catalogue and prices mailed upon request

HAMMOND

Dust Proof Furnace

Designed for Perfect Heating and Ventilating.

PROVIDES COMFORT

AND

INSURES HYGIENIC CONDITIONS

With it's Winged Firepot giving immense radiation, and with all dust eliminated, its healthful and economical features cannot be overlooked.

UP-TO-DATE

and built on most modern principles, by

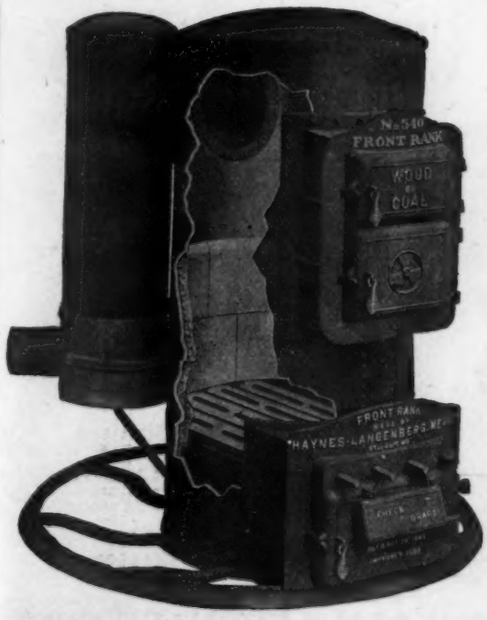
Peck-Hammond Co.

HEATING AND VENTILATING ENGINEERS

125 E. PEARL STREET

CINCINNATI, O

FRONT RANK STEEL FURNACES



are the peer of all Steel Heaters

NO DEALER SHOULD BE WITHOUT THEM

Front Rank Furnaces have been on the market for nearly twenty years, and at present, are being sold in every State in the Union where furnaces are used. **We guarantee them** to burn hard or soft coal, wood or coke, besides which **Any Hot-Water** combination can be used in the **Front Rank**

Write for Our 1906 Catalogue.

Handsomely illustrated—containing pertinent and pithy furnace facts.

HAYNES-LANGENBERG MFG. CO.

ST. LOUIS, MO.

The Test of Material

is in its lasting quality—that's why it never pays a Dealer to use cheap goods.

They can't last—and are sure to come back—causing trouble and expense, and what is more serious—a dissatisfied customer.

This never pays.

The best material made goes into "THATCHER" goods—always.

It cannot be doubted.

Dealers using them—are satisfied because—it pays to use the best—after all.

Our prices on these goods would interest you. —We'll send them at a word from you.

Thatcher Furnace Co.,

110-112-114-116 Beekman Street
NEW YORK

GERMANIA

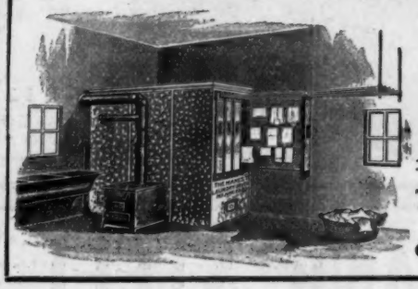
FOR HARD COAL, SOFT COAL OR WOOD

No picture can do justice to this Beautiful New Range with High Closet. And we've many others.

SEND FOR OUR CATALOGUE TODAY

SOUTH ERIE IRON WORKS
South Erie, Pa.

The "Manest" Family Clothes Dryer



A Laundry Stove and Drying Cabinet Combined.

One fire boils the clothes, dries the clothes and heats the irons. Good profits to agents.

THE MANNEN & ESTERLY COMPANY
Successors to MANNEN & ESTERLY
CLEVELAND, OHIO

FLORAL CITY FURNACES

are as easily managed as an ordinary stove.

They will **burn Hard Coal, Soft Coal and Wood Equally Well.**

Our Furnaces are recognized as the **most reliable** on the market.

No Dealer Should be Without Them.

Send for our latest CATALOGUE

MONROE FOUNDRY & FURNACE CO.
MONROE :: :: :: MICHIGAN

"HERO"

FURNACES

Are adapted to any climate.

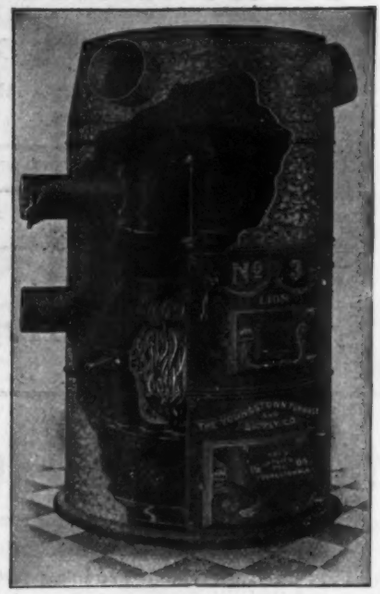
If you want the Best Line of Furnaces send for our illustrated catalog.

Charles Smith Co.

101 Lake Street, Chicago

THE NEW

LION FURNACE



Now Ready for the Trade

Can Use Hard or Soft Coal

Simple in Construction

and a Successful Heater.

Our Catalogue gives you full information.

Write for it TO-DAY

YOUNGSTOWN FURNACE & SUPPLY COMPANY

YOUNGSTOWN, OHIO

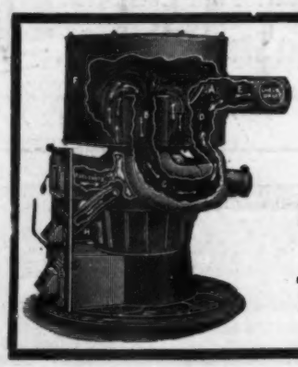
Address all western inquiries to our Western Distributors, COOK & VAN EVERA, 38-40 Lake Street, Chicago.

THE "X.L.O." WARM AIR FURNACES

are heavy, plain and effective. No "clean outs." Grate and Radiating surface large. Been under severe test 5 years. Catalog explains all about it. Write us. Special prices for 1905.

The Wellsburg Heating & Foundry Co.,

Wellsburg, W. Va.



Perfect Blast Device

Clinker Punch
Big Tubular Radiator
Secondary Radiator
Burns Soft Coal or Gas and can be changed quickly

THE BONNOT COMPANY, Canton, Ohio

Makers of GOOD Furnaces

Acme Ovens, Hot Plates

Cookers and Ranges

FOR ADL GASES

CATALOGUE No. 43 JUST OUT YOURS FOR THE ASKING

H. ADLER CO., Makers

Carnegie, Pa.

WESTERN OFFICE AND WAREHOUSE:
1210 W. 10th St., KANSAS CITY, MO.

Here's a Snap for Wide-Awake Range Dealers

I am going to sell 1,000 400 lb. six hole steel ranges finished in Japan for

$15.00 Each

just to keep my boys busy and foundry running full blast. I'll sell the ranges too, so you'd better get in line and ORDER NOW.

These ranges formerly retailed at $60 each. Send me a carload order and get my best cash discount or I'll give dating to firms with satisfactory credit. What better proposition can you ask for, if you have a little capital, are sufficiently enterprising, and want to make money?

DO YOU KNOW there is a big demand for the "Willard" Steel Ranges because they give perfect satisfaction, and don't cost too much? Then why don't you supply them? I would much rather sell to a good hustling dealer than direct to the consumer.

WILLARD STEEL RANGES

are advertised in many leading publications, and the people know them and want them. Get my prices—it means profits—DOLLARS—to you. Every sale leads to another. I can sell you a better range than you can buy ANYWHERE for the money, one that cooks well and bakes evenly and perfectly, and will last a lifetime, with proper care. Tell me how many ranges you can sell annually and I will make you a very interesting proposition.

AGENTS WANTED.

WM. G. WILLARD, Room No. 28 Willard Bldg., 316 CHESTNUT STREET, **ST. LOUIS, MO.**

Champion and Marquart IMPROVED STEEL RANGES

Are universal favorites because they save time and strength.

Our Ranges Save Fuel

and are unsurpassed as regards simplicity, economy and workmanship.

Send for our Catalogue.

Champion Steel Range Co.

CLEVELAND, OHIO

Post yourself on Vacuum Heating

MORGAN PATENTS

NEW LINE OF CATALOGUES WRITE AT ONCE FOR FULL PARTICULARS AND PRICES

CHICAGO MINNEAPOLIS — Kellogg-Mackay-Cameron Co. SOLE OWNERS — KANSAS CITY SEATTLE

Producing Want Ads.

To THE AMERICAN ARTISAN:

Please discontinue my advertisement for a clerk. I have had enough applications to fill fifty stores. Your valuable paper hits the right spot.

Yours truly,
R. H. SUETTINGER.

Two Rivers, Wisconsin, March 29, 1906.

REGISTERS : FACES . BORDERS

in every conceivable style, shape, design and material, made by

THE FERROSTEEL CO., Cleveland, Ohio

FERROSTEEL CAST—Mechanism and Finish Perfect, Designs Artistic and Attractive.

FERROSTEEL MODIFIED STEEL—Face Cast, Bottom Wrought Steel, Air Capacity Large, Designs all Styles.

FERROSTEEL WROUGHT STEEL—The most rigid made. Air Capacity greater than all Other Plain Lattice Wrought Steel Goods.

New Catalogue Just Out—FREE. Prices Rock Bottom. Our Record is Our ☞

Persistent Superiority
Persistent Superiority
Persistent Superiority
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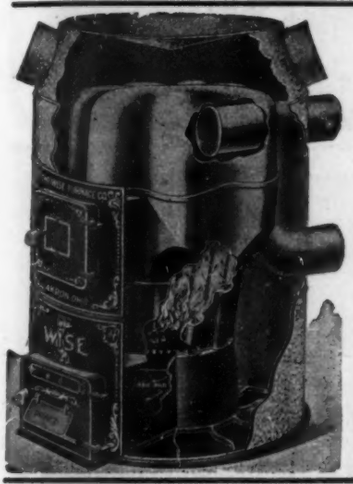
Persistent Superiority



The Wise

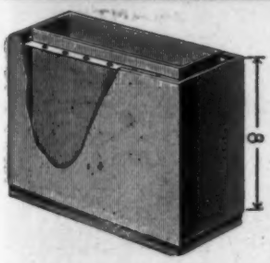
possesses more of the qualities which combine to make a simple, reliable, and practical furnace than any other on the market.

Whatever the test there is enough and to spare.

Write for catalogue.

The Wise Furnace Co.

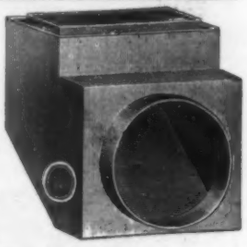
AKRON, OHIO



The Michigan Safety Furnace Pipe Company

Corner Brooklyn and Abbott Sts.

DETROIT, MICHIGAN



Manufacturers of Safety Wall Pipe, and Single Pipe and Fittings, in both tin and galvanized iron.

Send for our 1906 Catalogue. **Our new factory insures you prompt delivery.**

We belong to no combination. **Don't get our name confused with other manufacturers.**

MONCRIEF

Warm Air Furnaces

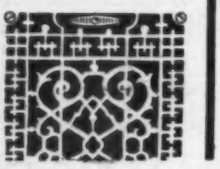
Combine SIMPLICITY, DURABILITY, ECONOMY and CLEANLINESS IN USE

SPECIALTIES
- All Cast Iron
- Moncrief Duplex Grate
- Large Radiating Surface
- Top Return Flue
- Double Fire Pot
- Large Grate Surface

HENRY & SCHEIBLE CO.

6-8-10 Long Street, CLEVELAND, O.

Sales Agent—J. C. KIMMEL, 3314 East 15th Street, Kansas City, Missouri



Independent Semi-Steel Registers

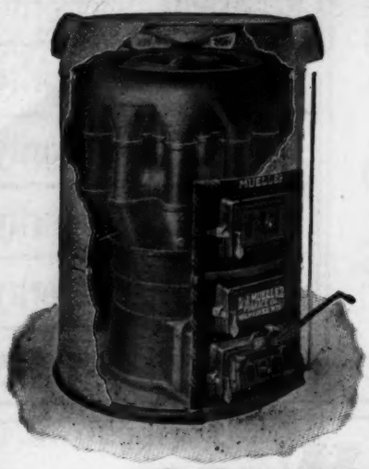
All the advantages of steel
All the advantages of cast iron
Our new catalogue should be in your hands

Independent Register Co.
Cleveland, O.

THERMOSTATS

SPRAGUE DAMPER & VALVE REGULATORS Non-Electric.
16 years in use. Thousands giving satisfaction; they are guaranteed; also Sprague Electrics, and automatic checks for Steam, Hot Water and Hot Air Heaters of all kinds.
HOWARD THERMO. CO., - West, Oswego, N. Y.

Refer to the **Buyer's Directory**



WHY IS IT

that over 40,000 **MUELLER** heaters are in use throughout this Country? :: :: :: :: :: ::

The reason is that they were brought to the highest standard when first placed on the market, and have always maintained this standard. Dealers and consumers soon recognized them as the Best.

Every Mueller furnace installed is an unsalaried salesman for us as well as for the dealer who handles them. :: :: :: :: :: :: :: :: ::

Do you wish the agency for the **MUELLER?**

L. J. MUELLER FURNACE CO. ESTABLISHED 1857 191 Reed Street, Milwaukee, Wis.

The Pleasant Home ALL CAST Furnace

Durable

Economical

Large Capacity

Adapted for Low Cellars
MODERATE IN PRICE

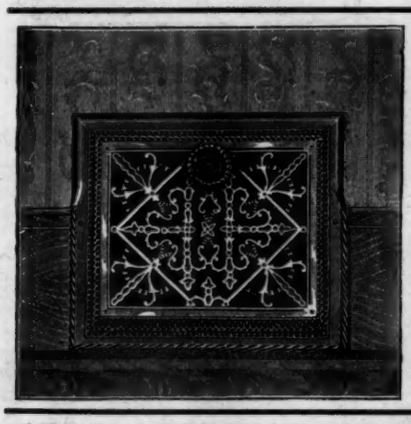
This is a 1906 Construction

The Latest And Best

SEND FOR CIRCULARS

Western Stove Works

PEORIA - - - ILLINOIS



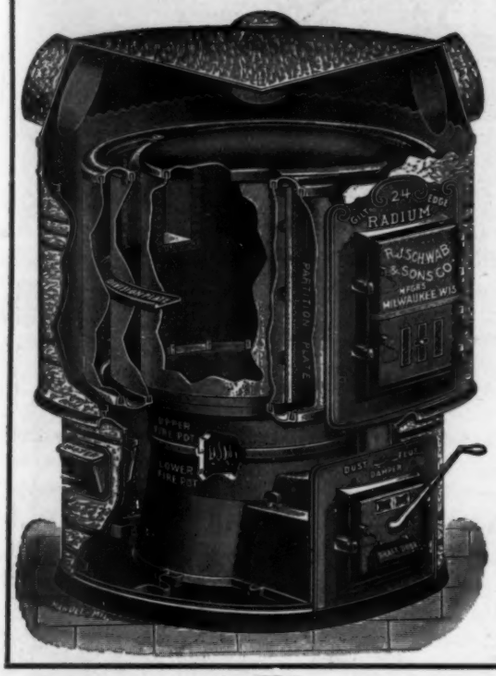
THE SCHWAB SIDE WALL REGISTER

THE SCHWAB SIDE WALL REGISTER AND REGISTER BOX, NEATEST IN DESIGN, NOISELESS IN OPERATION, SUBSTANTIAL IN CONSTRUCTION, A FACTOR IN MODERN METHODS OF HEATING RESIDENCES FULLY ILLUSTRATED IN OUR REGISTER CATALOGUE. SENT FREE ON APPLICATION.

R. J. SCHWAB & SONS CO., The Furnace Men **Milwaukee, Wis.**

For quick results in advertising, or up-to-date trade literature, give me The American Artisan every time. *CHAS. HAHN, Mandan, No. Dak.*

THE GILT EDGE RADIUM



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The air entering at the front in the **Gilt Edge Radium** is controlled so as to give greatest **Uniformity of Heat in the Fire-Pot.**

Greater efficiency cannot be found in any other "Horse-Shoe" Furnace.

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R. J. Schwab & Sons Co.

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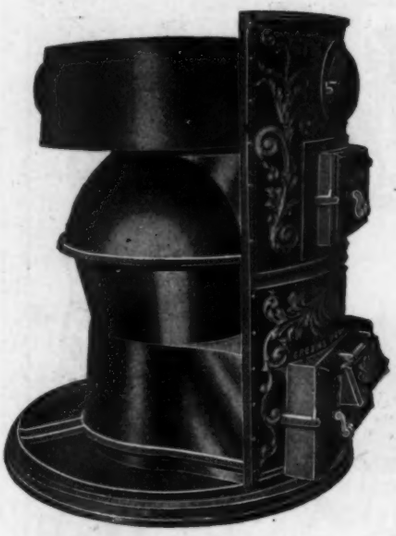
MILWAUKEE, WISCONSIN



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are easy to sell and we manufacture a complete line. Six styles in all. Individual opinions differ as to the best construction for fire resistance, but no matter which style you sell, it is a Green Furnace and up to the Green Standard of material and workmanship. Our prices may surprise you.

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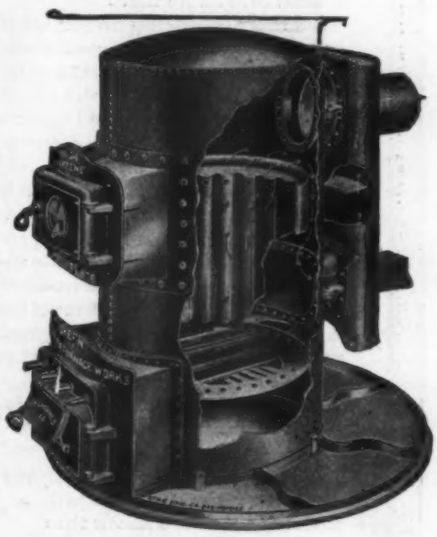

A. C. BECKER, Osceola, Iowa,

Writes:

"I became a regular subscriber to THE AMERICAN ARTISAN when I entered the hardware field. I have remained one ever since. For me, it is the most interesting, the most instructive and necessary paper published No novice should start a hardware business without it. Without it, no veteran can hope to be a success."

Every year a few new heating stoves are invented and put on the market. Great and glowing claims are made for them and many believe and buy.

They go forth "like the sky rocket" and heating stove history of past years tells us they return "like the stick."

Gradually the impression goes abroad that they did not fulfill their promises and they flourish no more. Then history repeats itself—another "World Beater" is born to become a dead one in its turn.

This has been going on for all the 35 years the Genuine Round Oak has been on earth and yet it is still here—hale and hearty thank you, with the same good character and "holding the belt" as the stove that fulfilled its promises.

Some people think it ought to have an ash pan in the bottom, and we say again that an ash pan in the bottom of an Oak stove kills the very features that have made the Genuine Round Oak Stove famous, and enabled it to gain the greatest reputation and largest sale of any stove known in the business.

To a merchant who appreciates a stove that will make its own way if given half a chance, located in a town or city where we have no agency, we will unfold still more about this leader of all heating stoves. Address

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P. D. BECKWITH

Fred E. Lee, Manager

Dowagiac Mich.

MAKERS OF GOOD GOODS ONLY

"Good-bye, Dowagiac."

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES, THEIR POSSESSIONS AND CANADA, (Invariably in advance): ONE YEAR, POSTAGE PAID. $2.00.
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CHICAGO, APRIL 21, 1906.

Exports and Imports.

THE BUREAU of statistics of the Department of Commerce and Labor has just issued figures of the exports and imports for March, 1906.

It is shown that imports for March, 1906, are $113,625,066; for March, 1905, $110,431,188; for March, 1904, $91,347,909, there being a steady and healthy increase. Figures are also given for the nine months ending March, 1906, which are compared with the corresponding months ending March, 1905, and March, 1904. These show that the imports for the last nine months are $74,154,472 greater than for the corresponding nine months ending March, 1905, the figures being respectively $913,584,586 and $839,430,114.

The figures showing the export situation are even stronger. There was exported in March, 1906, $145,522,342 worth of goods, as against $136,978,429 in March, 1905, and $117,190,812 in March, 1904. For the nine months ending March, 1906, the exports were $1,343,913,725, which is $198,874,488 greater than the exports for the nine months ending March, 1905.

We are going ahead all the time, and when that consular reform measure is a thing of reality we will go ahead at a much more rapid rate.

Parcels Post.

In order that one may properly understand any question, he must be able to look at that question from every viewpoint. He must put himself in the other man's place and consider, as fairly as he is able to consider them, the fundamentals of the other man's views. Fair-minded as one may be, however, it would seem that there is but one side to the parcels post question, and that that side is not the side of the advocates of the bill.

The retail trade of America is at the present moment seriously menaced by the attempt to put through this bill, notwithstanding the claim of its advocates that it will do good, and a greater good, to a larger number of people than the number to whom it will do harm.

Will it?

The only possible helpful effect of such a bill may be stated as follows:

It will enable residents of rural districts—for it is from rural districts that the great bulk of mail order goods is purchased—to buy small articles at a slightly reduced price.

Where is another good effect of enough importance to make it worthy of consideration?

But wait. Let us see if this is a good effect. What will be the result of centralizing still further the country's markets?

The small dealer will be most seriously hampered. With the small dealer out of the way, the farmer himself will be without a market for his smaller produce.

There will be to a further degree a consolidation of business in the hands of a few great merchants and a nearer approach of the monopolization which is so feared by the public generally.

There will be a still greater percentage of increase in city population, brought about by changed conditions in the country districts, and a smaller increase in rural population, until, in many cases, there will be an actual decrease.

There will be an added burden to the already overtaxed Postoffice Department.

Are any of these things good?

It would seem not. Taking but one of the questions into consideration, does it not appear that the effort on the part of the large moneyed interests to get a hold on the mails similar to that which the great trusts now have on the railroads should be instantly squelched by the public? We are now suffering from the beef trust, the oil trust and the rest of the gigantic combines. Why, then, should we allow, if protests on our part can prevent it, the creation which would be equally as hard on the small dealer?

The so-called common people, the people without great wealth, without great social position, are the bulwark of this and every nation. Any legislation which can in the most remote way attack them as a class is wrong, is a great politic mistake. The parcels post legislation contemplated is more than a remote attack; it is a direct attack.

RANDOM SKETCHES.

BY SIDNEY ARNOLD.

WHEN THE priests of ancient Rome for one cause or another wished to impress the populus they marched with all solemnity to the sacred pen wherein dwelt the sacred geese, and, through a "divine power," which they alone possessed, translated the sacred cackling into prophetic instructions to the people of the Eternal City. And these instructions were followed. There must undoubtedly have been a large percentage of the Roman citizens who had a feeling that the instructions of the geese were given in strict accord with the wishes of the priests', but, nevertheless, what the priests said the geese wanted done was

carried out. Rome being head and shoulders above her neighbors in warlike power, these instructions never resulted in any lasting harm to the city. That, however, is an incident. The point I wish to make is that even then, as to-day, the people were willing to be fooled.

America's greatest man, Abraham Lincoln, got off a bon mot to the effect that it was impossible to deceive all the people continuously. That may be true—is true—but it is a very simple matter to fool enough of the people right along to make it a paying proposition.

One of the greatest originators of ideas the world has ever produced, P. T. Barnum, when reproached by some straightlaced individual for carrying on one of his palpable fakes, replied, "Why, sir, I am doing the people a kindness. They like to be fooled. They actually demand deception." And he was very nearly right. His great shows were built up on this principle, and yet where will you find a man, woman or child who will say that he or she did not get his or her money's worth at one of these performances? We all remember Joe-Joe the dog-faced boy, who was never nearer Borneo, or whatever place it was the posters said he hailed from, than Coney Island. And we were all much more interested in him than we were in the lecturer that talked on municipal reform at the Town Hall the other evening. And the Circassian girls—the ones who originated the bleached-blonde craze, you know—weren't they more entertaining than that article you read on the tariff last night? And the "bearded lady" who everybody said was a man, and the man who walked bare-footed up the ladder of swords, and the glass-eater—oh! yes, we all do like to be fooled. I saw a trick horse at a vaudeville the other night. Different persons in the audience were requested to call out small numbers—say, six, nine, three. The horse then added them mentally and stamped the answer on the stage with a ribbon-covered hoof. Six and nine are fifteen and three are eighteen. Sure enough, the horse stamped eighteen times. I was enjoying myself immensely when some thick-headed know-it-all called out in a hundred-pound-pressure stage whisper, "There's a fellow under the stage who tickles his foot and makes him stamp any number of times he wishes." That man should have been put out. I went there, we all went there, to be fooled and he refused to allow us to get our money's worth. Probably twenty people heard his explanation of the trick and, at fifty cents admission each, he was a thief of ten dollars.

It is this same weakness on the part of us all which has been the making of the mail order houses. We like to be fooled. Tell us that we can get ten dollars' worth for eight and we believe it. You know we do. We do stop to consider that any busienss man knows what a thing costs him and how much it costs to sell it, and that he will to the sum add as large a profit as he dares. We want to be fooled. We are told that the mail order houses are able to hypnotize the manufacturers into selling them goods cheaper than any one else can buy. And we believe it. Why? Just simply because we do not stop to consider things. We have all gone into department stores after the shoes which are said to be "marked down" from six dollars to two-ninety-eight and we have all found that through some peculiarity in the shape of our foot, of which we never knew before, we cannot get fitted. "But we have a very nice shoe in our regular stock, etc.," says the persuasive clerk. About ninety-nine times in a hundred we buy from the "regular stock." And then the cheap store trick of marking goods from ten cents per yard up to twenty and then down to eleven is known to all of us, but we will buy at eleven cents where we would not at ten. I wonder why it is that we insist on being fooled?

In every walk of life it is the same. About twelve years ago there arose a "prophet" in Chicago who preached of the day of judgment, which was, it seemed, about six weeks off. At a stated time there was to arise from out Lake Michigan a tidal wave at least forty feet high which would completely destroy the city. The prophet had it all down pat from a certain verse of a certain chapter of a certain book of the Old Testament, and he knew to the exact minute when the ungodly, of whom, Lord knows, there's a plenty, were to be drowned. About two thousand of the "faithful" donned white robes on the fateful day and early in the morning sought the nearest hill, where they waited in holy exaltation for the finish of the stay-at-homes. When the shades of night had fallen, they returned by way of the alleys, but it is a safe bet that fifty per cent of them have been almost as badly fooled on one or more occasions since then.

We don't have to go beyond the news items of the current papers to find instances. Take Brother Dowie—Elijah II or III or IV or whatever his number is.

But what's the use? If we want to be fooled, it is our privilege as free-born American citizens, and we'd like to see any one who could stop us, wouldn't we!

* * *

THOSE Pennsylvania miners do certainly insist on getting killed with a spirit which is worthy a better cause. The play is in four acts—drink, fight, tragedy, arrest. There should be a universal law that no man be allowed liquor unless his tendency is toward a jag of the "happy" persuasion.

* * *

HAVE YOU noticed any youngsters crying as though their hearts would break lately? It is because some one has stolen their goat. And why would any one steal the little fellow's goat? Simply because the aldermen of Newport, Kentucky, have trodden rough-shod on the rights of the youth of America and established a use for goats which is entirely different from and foreign to their previously accepted life's avocation, which was to draw juvenile carts and wagons.

And now, what do you think? An ordinance was introduced by a Newport alderman which provides for the purchase of twenty able-bodied, hungry and large-stomached goats which are to be utilized as garbage consumers.

* * *

ACCORDING TO the United States Supreme Court, which certainly should know, the only divorce which is binding is that of a man from his money.

Or, at least, it is nearly that bad. One must be careful after this in getting a divorce that his wife and

he are both residents of the state in which the action is brought. This decision is hot off the griddle. Of course, nobody in the hardware business is personally interested, but it is just as well to be in a position where one can warn his friends.

* * *

It is announced that President Roosevelt desires to become a toga wearer after his term as chief executive has expired. If he carries out his plans, he will step from one office to the other without even a temporary submersion into private life. Should it be Senator Roosevelt, it will be interesting to watch his welcome by the men in the Senate who seem, at the present time, to devote most of their energies toward putting obstacles in the way of his pet schemes. The dignities of his office command certain respects, but it is easy to imagine some old gray-beard clenching his fist and saying with the murderous smile of an expected joy: "Wait, just wait."

* * *

"As soon as I have reached a point in the banking world where I have a yearly income of $10,000 or over," said a young man the other day, who seemed fairly well started toward his goal, "I am going to eat nothing for dinner the year round but buckwheat cakes and patronize nothing but quick-lunch restaurants."

"Why not do it now?" he was asked. "It doesn't take a $10,000 income to buy a lunch of that description."

"I can't afford to," sighed this man of peculiar appetite. "People would think I was broke."

Can you imagine a man who is discontented because he is compelled to eat good meals and wear good clothes? But he was. And the spirit of dissatisfaction which he showed is manifested by almost every one for one cause or another.

The man who has no money is envious of the man who has. The man who has money, while he would not under any circumstances willingly part with it, is envious of the freedom from worry which he imagines the man who does not have to wonder how he will "invest that $100,000," must possess.

The man whose work is indoors envies the salesman who has nothing to do but walk around all day and be nice to people. The salesman envies the man at the desk who is not continually under the strain of trying to keep cranky "prospects" in a good humor. The office boy envies them both and the boss envies the office boy.

I guess it is a case of disposition after all. Some people are happy by nature and if they broke a leg would immediately begin to gloat over the prospect of being fanned by a pretty nurse and watching the boys play marbles through the windows of the hospital.

* * *

Perverse fate camped on the trail of Joseph H. Wilson and made his best laid plots look like a four-bit ticket in the Louisiana lottery. Wilson lived in Cincinnati, Ohio, and during his days of prosperity as a wealthy dealer, took out insurance for $3,000. Then something went wrong and he lost even his meal ticket. His insurance was permitted to lapse March 22nd, but was extended to April 1st. Wilson knew that he could not pay the next premium, but he decided to emulate Senator Depew and get some of that pleasing insurance graft. Not being a financier, the only way he could figure to do this was to invest in a small portion of laudanum for the purpose of making a graceful exit from this world of strife prior to April 1st. He took the producer of the eternal sleep according to schedule but the doctors—mean things—hooked up with his good constitution, and made an immoral combine to keep him alive until after the day on which his policy lapsed—April 1st. The combine worked as combines will, and Wilson did not die until last Monday.

All this goes to show that it takes a Wall Street education to beat the insurance game, and that there is something in the Christian Science method of physicking after all.

JAPANESE METHODS OF COOKING AND HEATING.

Consul Sharp furnishes from Kobe, in response to an inquiry, information as to the methods used in Japan for cooking and heating purposes. He says:

The fuel in use here is charcoal, wood, coal, coke, and kerosene oil. The Japanese cooking apparatus is of two kinds—one the "shichirin," a small portable construction of metal or earthenware, costing from 25 cents to $1.25, and heated by means of charcoal; the other the "kamado," a kind of stationary furnace, built of brick and mortar, the price varying from $1.25 to $10, and burning wood as fuel. The houses are usually heated by charcoal braziers, costing from 50 cents to $15.

Foreigners here use cooking stoves, of which some are imported from America, England, and France, but the greater number are of Japanese make, while their residences and offices are heated by grates and stoves, most of which are of Japanese manufacture, though those houses built by foreigners are usually fitted out with American or English grates. Only a few furnaces and steam-heating plants are in use. Very creditable stoves and grates are made here, and though somewhat inferior in quality and finish, they are largely taking the place of the imported article on account of the cheap prices at which they are sold. The prices of Japanese manufactured stoves and grates show a great variation, the approximate figures being: Office stoves from $3.50 to $48, cooking stoves from $7.50 to $98, oil stoves from $3.50 to $39.50, and grates from $3.50 to $40.

The Wonder Manufacturing company is erecting a manufacturing plant at Mount Pleasant, Pennsylvania, which will be fully equipped with the most modern machinery for the making of stoves. It is expected that the plant will be in operation by July 1st and every energy is being bent by the officials of the company in that direction. The principle product of the new company will be a gas stove with a patent burner, but they will also manufacture a complete line. The officers of the company are T. E. Moore, president; E. O. Daniels, vice president; B. E. Lindley, treasurer, and H. E. Lindley, secretary.

News Siftings

The Royal Worcester Company has been incorporated with a capital stock of $10,000 by Chas. D. Folson, Upper Montclair, New Jersey; Louis H. Strousse, 50 West 88th Street, New York, and Daniel A. Robertson, 376 Bainbridge Street, Brooklyn, and will manufacture stove polish.

The Jellico Machine & Foundry Company will very soon be ready for operation at Jellico, Tennessee. Work has already been begun on this plant and will be pushed until its completion. This company will do general repairing on both heavy and light machinery and will also make a line of stoves.

The Baxter Stove Company of Mansfield, Ohio, resumed work in their molding shop on April 9th after a shut-down of three weeks due to a disagreement with their molders. Officers of the National Iron Molders' Union were expected to send a representative to hold a conference and attempt to adjust matters, but before he arrived the company and its employes got together and effected a satisfactory adjustment. Both parties are to be congratulated.

Everyone who has had any dealings with the Black Silk Stove Polish Works of Sterling, Illinois, for the last quarter of a century knows Billy. He has been there and grown with the development of the business and very few know him by anything else than Billy. There was a city election at Sterling on Tuesday, the 17th, and among the successful candidates was William Deemer, so that hereafter in addressing our mutual friend the stove and hardware men will kindly remember that Alderman William Deemer is our old friend Billy, and those that know Billy know that the compliment of electing him alderman was well deserved.

A satisfactory portable cooking stove for South Africa is yet to be produced, says the South African Gazette. A stove which a farmer can carry in a wagon, with a few feet of piping, for quick setting up, would find a ready sale, as would another pattern which could be fixed some few feet from the wall in the middle of the room. This should have a large oven for roasting meat and a large boiler for keeping water hot all day, the fire being capable of being quickly kindled at little cost of wood, owing to its scarcity. American, Scotch, Swedish and French firms have all essayed to produce the requisite article, but failed, the nearest approach to the requirements being the Scotch "Dover" make, but without feet. The stove should not be liable to breakage, and should be sold at a low price and produced in three sizes—Nos. 6, 7 and 8.

The Union Stove Works of New York City, so recently bereaved by the death of their late vice-president and manager, Mr. Peter B. Acker, again suffered a severe loss in the sudden taking off of Mr. William T. Edwards, a director of the company, who died on Sunday morning last, at his late residence, 9 Clinton avenue, Jersey City, New Jersey.

Mr. Edwards was born on Staten Island on January 28, 1870, and came with the concern when between 12 and 13 years of age as an errand boy.

He was a bright, willing, office boy, and after only a few years' service in that capacity was promoted to the position of entry clerk, which he filled with so much ability and credit that he was in a few years advanced to take charge of the shipping department in New York City. In two years he was again promoted to floor salesman and as one of the assistants to the management. Quite recently his duties were in the nature of sales manager.

He was also made a stockholder in the concern about three years ago and elected a director at the late annual meeting of the corporation on January 30th.

A widow and two children survive him.

BLACK SILK STOVE POLISH IS BLACK.

The Black Silk stove polish, manufactured by the Black Silk Stove Polish Works of Sterling, Illinois, is a polish that performs the work for which it is intended, and when that is said there remains nothing more in commendation possible. Black Silk is the polish which sells your stoves. It is a polish which enables you to obtain a higher percentage of profit than your competitor.

Among the strong points claimed for it are that it is Black Silk in quality, it lasts longer, it is the polish which is always used for fine exhibition work and that though the original cost is more, it is cheapest in use. It will keep in any climate. The luster it gives is a luster which will last; it never dries out nor rusts through the cans; it is of the same quality whether liquid or paste, and it is known and recognized as the standard.

To prove to your own satisfaction that quality does not mean expense, order a case of Black Silk stove polish from your jobber and if it does not do what its manufacturers claim its cost will be refunded to you by them. It is put up in five-pound cans and family size, liquid and paste. This is an article you need.

The secret of making Black Silk stove polish is a carefully guarded one. It has been handed down to the third generation. This polish is so favorably known to dealers that severe precautions are taken to keep the formula from the world. Your jobber can give you further information and supply you with this well-known polish.

When writing to the manufacturers, be sure to mention THE AMERICAN ARTISAN.

AN ARTISTIC CATALOGUE.

More and more are the up-to-date merchants and manufacturers of the United States realizing that it is not enough simply to present the list of goods they handle to the prospective customers, but that this presentation must be made in an attractive and artistic manner. The merchant of to-day has been pampered with literature of so high a grade that unless he is more than ordinarily interested in the matter sent him, he will pay very little attention to catalogues which do not possess typographical features out of the ordinary.

That these facts are realized fully by one progressive house is shown by catalogue number 46, which

has been issued by the Pittsburg Stove & Range Company of Pittsburgh, Pennsylvania, illustrating their output of Cinderella stoves and ranges. This catalogue is nicely bound with a cloth back. It shows on the first cover page an attractive engraving of the Cinderella of old, the young lady whose vicissitudes have interested 99 out of 100 of the human race. This picture is surrounded by an attractive design, which is prepared by a real artist.

The announcement is made that in 1905 91,200 stoves were sold by this company, who say that they believe this to be the world's record. This remarkable achievement speaks well for the energy of their salesmen, the loyalty of their trade and the satisfaction which their goods have given. Catalogue number 46 contains the description and illustration of a number of new articles, which show that this company is keeping strictly abreast of the time. The announcement is made that duplex triangular revolving dump and shaking or basket grates can be specified in all of their stoves. A copy of this catalogue, together with other information, will be sent to dealers who mention THE AMERICAN ARTISAN.

KING BEE AIR BLAST STOVE.

The latest improved King Bee air blast stove which is shown in the accompanying cut finds a place in the first rank of sellers of the most progressive and up-to-date stove dealers.

This stove has a large nickeled feed door with patent

Culter & Proctor Company's King Bee.

perforated puff preventer, pull-out down draft register and a large, handsome deflecting ring. The cut herewith shows the down draft hot blast and also the supply of air entering through the patent perforated puff preventer in the feed door, which insures perfect combustion at all times and which is said to positively prevent explosions such as are common to other stoves of this class. This stove is designed to burn soft coal, hard coal, lignite, slack, wood, cobs or any kind of fuel with equally good results, and is said to give more heat with the same amount of fuel than can be found in similar stoves of other makes. The feature of holding fire, burning gas and smoke, is said to operate to perfection in the King Bee. It is claimed to be as simple as can be—the cleanest stove on the market and one which it is a genuine pleasure to operate.

Each King Bee is mounted with this company's anti-buckling ring, which is claimed to prevent the buckling or warping in the drum at the top of the fire pot and to effectually prevent any possible draft getting in between the fire pot and drum, however long the stove may be used. Full description of the many valuable features of this stove which it is impossible to enumerate here will be sent to dealers interested upon request by the Culter & Proctor Stove Company of Peoria, Illinois, if mention is made of THE AMERICAN ARTISAN.

A DECORATIVE NOVELTY.

The March-Brownback Stove Company of Pottstown, Pennsylvania, has sent out as an advertisement a most beautifully stamped and embossed image of an Egyptian woman, which will lend an air of beauty to any office.

The primary object, the only object in fact, of the sending of blotters, paper-weights, calendars, etc., by a manufacturer to his customers is, of course, the desire to keep constantly in the eyes of the trade. To do this the advertising novelty must possess some practical value or decorative value and be unique. The latest novelty of the March-Brownback Stove Company possesses the points necessary to attain and hold the attention of the dealer, and more than the percentage usually obtained by novelties will find their way to a permanent decorative resting place upon the dealers' walls. If you feel artistic to-day, write them for this article and mention THE AMERICAN ARTISAN.

AIR BOX FOR STOVES.

A novel device which is applicable to ranges, stoves and open grates, and which aims to provide a better control of the draft than has been heretofore possible, has been invented by Miss B. J. Mouat, P. O. South Dunedin, New Zealand, says the Scientific American. The device has the form of a box, smaller at the top than at the bottom. The rear of the box is left open, while the other three sides are formed of inclined walls provided with long vertical apertures. The bottom of the box is provided with a sliding plate, the purpose of which will be presently explained. The air box, as the device is termed, is placed on the grate of a stove, to which it is secured by means of bolts. It thus takes up most of the space usually occupied by the fuel. The rear of the air box fits closely against the rear wall of the firebox, but a narrow space is left on the other three sides to receive the fuel. By this means the area of the fire is greatly increased, while the depth is reduced. Air passes up from the grate into the box and thence

through the apertures to the fire. The plate at the bottom of the air box serves as a damper which can be moved in or out to control the amount of air fed to the fire. Owing to the shallowness of the fire and the general distribution of air, a perfect combustion of the fuel is assured. In proof the value of the air box it is pointed out that there is a material reduction in the amount of smoke from a stove supplied with this device.

THE ADVERTISING OF CITIES.

The value of advertising has long been realized, and it is to-day probably the most important feature of the business world. But it has been adopted slowly by the different commercial interests, and it has not been long ago that this aid to success was first taken advantage of by cities and towns. A number of municipal corporations, however, have had the courage of their convictions to a sufficient extent to warrant them to appropriate money for advertising purposes, and invariably they have met with success. Portland, Oregon, and Seattle, Washington, are two cities which have spent a very great deal of money in advertising, and now comes Chattanooga, Tennessee, as a city which is getting results by the use of printers' ink. The mayor, the board of aldermen, and the rest of the men behind the Chattanooga guns have decided to keep up this campaign of advertising. That they are wise is shown by information given to the public by the Chamber of Commerce of that city, which shows, among other interests, that:

Chattanooga melts more iron than any other city in the South.

It is the second city in building operations in the United States.

It has 278 manufacturing plants, making 450 separate and distinct articles.

The capital invested in manufacturing interests is $36,000,000.

The bank clearings in 1904 were $40,921,289; in 1905, $51,718,100.

The postoffice receipts in 1904 were $215,327.42, and in 1905, $244,562.

And Chattanooga is not selfish about itself. It is perfectly willing that other progressive cities should know of results obtained and do likewise.

STOVES AND THE ITALIANS.

Consul Roche writes from Genoa that there is an opening in Genoa and in other portions of Italy for a fair trade in American heating stoves, which seem to be well known by reputation but hardly at all by actual experience. There is on sale a so-called "Stufa Americana," which on close inquiry, is found to be a "fabbricata in Italia" or "in Germania," but the only American fabrication connected with it is its name. The retail price of the smallest one of these, which is little more than a sheet iron drum a yard high by 12 inches in diameter, is 100 lire, or $20. From this, the price runs up according to size, the largest being on sale for $78 in plain and $90 in nickel-ornamented ware. An American dealer can see how much profit lies here when a sale is made. Sales are not made very often, however, partly because the imitation American stove offered for sale there is a very inferior article; but the main reason is because few natives of any class have been accustomed to artificial heating until within comparatively few years, while Americans and other foreigners coming here with the traditional fiction that cold is unknown in "Sunny Italy" suffer more keenly because they have been used to well-heated living and sleeping rooms at home.

Whether the Genoese can be easily persuaded to adopt the American stove is another matter. They are not accustomed to the artificial high temperature which we maintain in America. Their houses, in fact, are constructed to contend entirely with summer heat and not with winter cold, being all built of stone, with enormously thick walls, floors of marble mosaic, ceilings from 10 to 15 feet high, and inner partition walls nearly 2 feet thick. A diminutive open fireplace, a ridiculously small oil stove, or nothing but a little charcoal brazier is depended upon to warm a vast room which is sumptuous in everything but comfort, as we understand the word. Hotels, even of the best class, are very slow in being provided with the so-called "central heating," while some of the finest old palaces are warmed no better to-day than they were when erected centuries ago. Churches, public buildings, theaters, and halls make no pretense of being heated at all.

Such being the case, and the native people wholly indifferent to a winter temperature which chills an American, the demand for stoves is naturally not very lively among them; but there are some three or four thousand foreigners living in Genoa, and all fairly well to do, besides the thousands of travelers constantly coming and going, all of whom prefer better heated houses and hotels. The Genoese himself enjoys the outdoor air and puts on heavier clothing only when he comes inside his "marble halls." As some of the halest octogenarians Consul Roche has ever met confess that they never had fire in their houses, except for cooking purposes, and the brilliant complexions of the people, young and old, rich and poor, attest their health and wisdom in that respect, the chief reliance for any trade in heating agencies must be among the hotels and foreign born inhabitants.

As for the expense, in addition to first cost, it is stated that the freight by ocean steamer from an American seaport on a single stove is according to its measurement and the duty, national and municipal, about 40 per cent of cost. For example, on a stove recently imported from America, and costing about $27 f. o. b., the freight was about $4, and the total duty $11. On a shipment of a quantity these expenses would be considerably reduced. Of course, in this as in all trade ventures, the most effective method of introducing the article is by means of an agent from the manufacturer or dealer who can speak the Italian language. Advertisements, circulars, or letters in English would be useless, Mr. Roche says.

Scammon, Abel & Co., Friend, Nebr., write:

"Enclosed find draft for two dollars for THE AMERICAN ARTISAN for one year. Your paper is *all right* —the best we have seen."

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 38 to 43 inclusive.

Edward H. Neavy, F. De C. Sullivan and E. M. Williams of New York City have incorporated the Ritardo Fire-Proofing Company with a capital stock of $10,000 and will manufacture paints, painters' supplies, etc.

Phil. Steward, Skowhegan, Maine, is treasurer and clerk of the Steward Heating & Plumbnig Company, which is incorporated with a capital stock of $50,000 for the purpose of dealing in hardware, etc. N. Steward is president.

Max Laufield, 232 45th street, Brooklyn, New York, John F. Yerker, 1382 Fifth avenue, New York City, and Abraham Greenburg, 120 West 112th street, New York City, have incorporated M. Laufield & Company with a capital stock of $6,000, and will manufacture a line of sporting goods.

Turpentine operators are experimenting with Chinese labor at Paradise, near Gainesville, Florida. Sixty Chinamen have been brought from Portland, Oregon, and their working qualities are now being tested. If the scheme proves successful, several hundred more will be brought in at an early date.

The Mannen & Easterly Company, Cleveland, Ohio, are more than holding their own with the "Manest" family clothes dryer. With a stove that will do the boiling and drying and heat the irons, no agent ought to complain of not being able to sell something good, and this is what the "Manest" family clothes dryer is.

The Baker-McMillan Co., of Akron, Ohio, have made a new level in their No. 5, so that users may pay a nominal price and get a full brass bound level. The stock is a choice, selected cherry, heavy cornered, tips cast, and made to stand wear. The quality and price are such that dealers can handle them to unusual advantage.

The Pittsburgh Steel Company of Pittsburgh, Pennsylvania, manufacturers of the Pittsburgh "Perfect" fences, say that these fences are made with the idea of easy adjustment and general durability kept in mind. They can be adjusted to uneven ground, will curb the strongest beast and are claimed to withstand the attacks of the elements longer than any other fence on the market.

Knoxville, Illinois, will shortly possess a corporation, the Enterprise Novelty Manufacturing Company, which will manufacture various hardware specialties, among which are curry combs, automatic window locks and mice and rat traps. This plant will be in operation within a short time. Machinery has already been purchased. R. L. Wilson is president, W. G. Stone is vice-president and C. R. Pihlblad secretary.

That South African trade has received an impetus since the effects of the Boer war have had time to die out is shown by figures of importation. In 1905 more than $7,500,000 worth of domestic iron mongerie was imported. These figures refer only to cutlery, lamps, stoves, bedsteads, culinary utensils and the like, and in them are not included fencing materials, farm implements, etc., which are naturally an enormous item in that country.

H. M. Gay, the well-known hardware salesman, whose services of many years have given him a personal acquaintance with the trade possessed by few men in the field to-day, is sending out a notice of his recent retirement from "the road." He is now in a position with the Phillip Gross Hardware Company, Milwaukee, Wisconsin, in which he can give the orders of his old friends personal attention. You are invited to call upon Mr. Gay or drop him a line as your wants require.

The Grand Rapids Hand Screw Co., of Grand Rapids, Mich., claim to be the largest manufacturers of benches in the world. Their complete line of cabinet, carvers', pattern makers' and manual training benches, hand screws, cabinet makers' clamps, and other styles of benches are well known to those dealers to whom a cheap, shoddy article is of no interest and handle only good grades. Their catalogue shows the wide variety of benches made by them, and dealers would do well to carefully peruse their catalogue.

The Western plastering trowel, manufactured by Henry Disston & Sons, of Philadelphia, Pennsylvania, is made of the highest grade of crucible steel. It is fastened with seven rivets to the long mounting with shield. The blade is accurately ground, extra thin. The end of the handle is beveled for thumb rest. There is a re-inforcing post at the end of the handle which is a strong feature of durability. This is but one of the many products manufactured by this company. Full information concerning them will be sent to dealers upon request to the manufacturers.

Iwan Bros., of Streator, Ill., have a post hole and well auger possessing such good points that any one interested in this class of goods would do well to write them for a catalogue. The auger is made in sizes from three to fourteen inches, the plate made of steel, the steel plates being interlocked. They work easily, require little pressure, and are made to bore in any kind of ground except solid rock. It has been used so successfully by stockmen, nurserymen, plumbers, instructors, and others, that it promises to become one of the well-settled pieces of tools that may be found anywhere at any time.

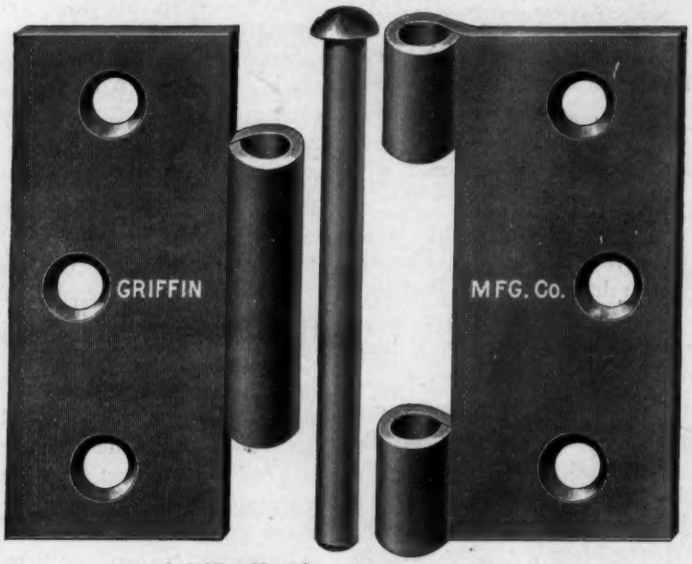
The revolving nail bin which is manufactured by the Revolving Bin Company, 234 Baird avenue, Chicago, Illinois, is a time saver and a sale bringer which every hardware man should have. This fixture is composed of four revolving nail bins, each with five compartments. It holds altogether twenty kegs of nails, and each section turns on ball bearings. There is a wheel bearing device that makes each section turn easily even though it is loaded heavily on one side and empty on the other. This company is desirous of getting in touch with live dealers and will gladly send full information on request.

The second annual tournament of the .22 Caliber Rifle League of the United States, which was held in Grand Rapids, Michigan, recently, showed the remarkable record of first, second and third prize won in each event by the Stevens rifle, manufactured by

the J. Stevens Arms & Tool Company of Chicopee Falls, Massachusetts. These victories were made possible only by the highest degree of efficiency in rifles, rifle barrels and rifle telescopes. Twelve of the twenty perfect scores obtained in the championship and re-entry matches were secured with Stevens rifles equipped with Stevens telescope sights.

A WROUGHT STEEL BUTT.

We are illustrating herewith a wrought steel loose pin butt with ball tips, which is made of planished, cold rolled steel by the Griffin Manufacturing Company of Erie, Pennsylvania. All of their wrought steel butts, and many sizes of strap and T hinges and door bolts, are made from cold rolled steel and have a very smooth and bright surface. This surface is designated as planished.



A Griffen Manufacturing Company Butt.

The Griffin Manufacturing Company claims to have the largest and best equipped hinge factory in the world. They manufacture all kinds of wrought steel and bronze hinges, butts, shelf brackets, door pulls and miscellaneous hardware. They issue an attractive cloth-bound catalogue, containing fifty-seven pages of description and illustrations of their products which will be sent to dealers mentioning THE AMERICAN ARTISAN.

A TIME AND STRENGTH SAVER.

A good line for the hardware dealers to handle is the triplex chain block made by the Yale & Towne Manufacturing Company, 9 to 15 Murray Street, New York City, and in demonstrating to your customers the worth of this article, you can at the same time save yourself much waste of time and energy by the building of a little chain block trolley system of your own.

This enables one man to handle in a short time more heavy cases, barrels, boxes, etc., than three able-bodied men can move by main strength. It reduces wear on the floor and does away with the stirring up of dust. The Yale & Towne Manufacturing Company announces that they are at the present time putting a triplex chain block lifting and transporting system in one of the largest stores in New York. Full information will be given by them to inquirers mentioning THE AMERICAN ARTISAN.

TERRITORY INCREASED.

The territory covered for the Columbian Hardware Company, Cleveland, Ohio, by R. S. Hickey has been increased from the states of Indiana and Michigan until it includes also Missouri, Kansas, Nebraska, Iowa, Minnesota, Wisconsin, North and South Dakota and Colorado.

Mr. Hickey is well known among the dealers in his new territory as he has covered it before. He has already made one trip with the success which must be expected when the high line of builders' hardware, vises, anvils and steel registers which he carries is combined with his well-known salesmanship ability.

STRONG LINE FOR HARDWARE DEALERS.

The Stewart Iron Works Company of Cincinnati, Ohio, has recently been compelled by the great growth of the demand for their products to build an immense addition to their already spacious factory. They now have one hundred thousand square feet of floor space,

Settee.

Lawn Vase.

and are in a position to serve their patrons even better and with greater dispatch than in the past. They assure dealers handling their goods that they will receive from them the very best work that can be had at the lowest prices. Every department of their business is under the careful management of experts who give the closest attention to the slightest details. Hundreds of skilled workmen are constantly employed each having his particular part to perfect, and all work is thoroughly inspected by the foreman in

charge of each department and must be perfect in every detail before leaving the factory.

When the number of possible uses for a high grade iron fence is constructed, it is really strange that all hardware dealers do not carry the line. Almost every building in your town would look better if surrounded by one of these fences. This company manufactures also a full line of lawn statuary, wire settees, vases, etc. The articles illustrated herewith are but a very small item in the total of their output. The time is ripe to take up this line and dealers will do well to write this firm immediately and at the same time mention THE AMERICAN ARTISAN.

"STERLING" POWER HACK SAW.

The "Sterling" power hack saw shown in the accompanying cut is manufactured by the Diamond Saw & Stamping Works of Buffalo, New York. It is made in two sizes, number one being for ten to twelve inch

Power Hack Saw.

blades and number two for fourteen-inch blades.

These machines are gear-driven, they have tight and loose pulleys, they are made with automatic shut-off and gravity feed and are also equipped with swivel vise.

An important feature of the "Sterling" machine is that any of its parts may be replaced when worn out, thus giving what is virtually a new machine at a minimum cost after years of service. Dealers interested in these articles should write immediately and mention THE AMERICAN ARTISAN.

THIRTY-TWO STRAND COPPER LIGHTNING ROD.

Maher & Sons of Preston, Iowa, manufacture a 32-strand pure copper wire cable lightning rod, shown in the accompanying cut, which they claim is the largest and heaviest now on the market. In the manufacture of this cable they say that they use only the best

A Sure Conductor.

Lake Superior copper that can be bought. The several strands are effectually wound so as to maintain the greatest conductive power. They are put up in 1,000 and 500 foot spools covered with burlap, which insures its reaching their agents in nice, bright shape.

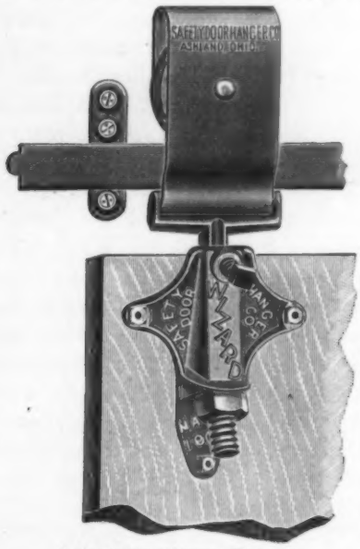
The "point" is one of the essentials in erecting a good job of rodding. The bayonet point sold by this company is made of Lake Superior copper of the same grade as their cable and is polished and lacquered. It is claimed to be the only bayonet point on the market which is made of pure copper.

When writing to this company you will assure yourself of prompt attention by mentioning THE AMERICAN ARTISAN.

THE BARN DOOR TROUBLE SOLVED.

The Wizard adjustable hinge hanger, manufactured by the Safety Door Hanger Company of Ashland, Ohio, is claimed to be the only adjustable flexible hanger on the market. The illustration shown herewith will enable one to see readily the many advantages it possesses.

The frame is constructed of heavy boiler plate steel and the door plate and sliding link of best quality malleable iron. The roller bearings are steel. Points of this article which make it so efficient are its lateral adjustment, its vertical adjustment, its swing-out and stay-on features, the fact that no special track is needed, that it allows no doors to drag at the bottom



Adjustable Hinge Hanger.

or to bind on the building and that it fits as close to the building as is desired. It is easy to adjust and is claimed by its makers to be the smoothest running door hanger on the market. Full information will be supplied by the manufacturers. When writing do not forget to say, "Saw it in THE AMERICAN ARTISAN."

COME YE AND EAT.

The following invitation is being sent to the favored number by Frank G. Drew, secretary of the Hardware Lunch Club of Philadelphia, Pennsylvania, in which he announces what the hungry ones have long been awaiting—the date of the annual shad dinner:

Dear Sir: The annual shad dinner of the Hardware Lunch Club of Philadelphia will be given Saturday afternoon, May 5, 1906, at "The Orchard," "Essington on the Delaware."

We speak for the occasion at least the same enjoyment that has attended our previous dinners, and we earnestly request you to join us.

Train leaves Baltimore and Ohio depot, Twenty-fourth and Chestnut streets, Philadelphia, 12:35 p. m., returning at convenient intervals during the early evening, giving us ample time for an enjoyable outing.

We hope you will find it convenient to attend, in which case please reply as early as possible.

PHILOSOPHY OF THE LIGHTNING ROD.

Moore Brothers Lightning Rod Company of Graham, Missouri, has issued a very concise little volume entitled "The Philosophy of the Lightning Rod" which is most interesting and tells how protection may be obtained.

This treatise as well as a beautifully printed catalogue, illustrating the outputs of the company, will be sent to interested dealers upon request, if mention is made of THE AMERICAN ARTISAN.

TO DOWN THE CATALOGUE HOUSES.

The "Retail Mail Order Problem," publication of which was announced in THE AMERICAN ARTISAN last week, is just off the press. It is a book which enters into the discussion of the various difficulties which confront the retail merchant in his effort to meet the competition of the catalogue houses, and provides sound business remedies therefor. It is published by Butler Brothers of Chicago, Illinois.

This book is the result of some two years of research into the problems of which it treats, including a very thorough personal canvass of merchants throughout the country, who have been asked to give their practical experiences in meeting this competition.

It is a fair book and treats its subject in a fair way. It meets each of the difficulties face to face and acknowledges at the beginning that the mail order houses have come to stay. The reader is impressed at the start with the absolute sincerity of the statements and arguments. Who cannot but be impressed with the enormous amount of work and thought which is back of all that is said? The book is large, some one hundred and twenty pages. At first glance one would think that it was too verbose—that it entered into too many minor details of the subject on which it dwells—but as one reads on through the first few pages, his attention is taken in a forcible manner and held until the last page is reached. The reader realizes that he is learning something all the time and that the ideas he may absorb will be of an inestimable value to him in his every-day business.

The keynote of the book is sounded in the advice to meet conditions fearlessly. It is admitted that these conditions must be met, and there is presented thoroughly every strong point of the catalogue house method of business. Then it goes to show with actual examples and irrefutable arguments that these conditions are not so bad as they have been thought to be by many retailers.

It shows that the business of mail order houses is largely built up upon "leaders" and that *as a whole* the retail merchant is able to sell just as cheaply as the catalogue house, when all conditions are taken into consideration. It shows that the great bulk of the sales of the catalogue houses are in certain lines which are separate and distinct from the general stock carried by the various classes of retail merchants. On this point it is said:

Year after year it is demonstrated over and over again that things, most of which in retail stores stand on the floor instead of being displayed in show cases or on shelves, are what retail mail order houses actually sell.

Vehicles, bicycles, implements, sewing machines, stoves, furniture, refrigerators, baby carriages, clothing, ladies' suits and wraps, sets of china and crockery, guns, watches, etc.—such it seems are the things the retail mail order houses really succeed in selling.

Also in lines like tools, for example, their sales are of the heavy and high priced articles the demand for which in any one locality is very limited but which, combined for an entire country, becomes of very respectacle proportions.

But in the low and medium priced goods, a full line of which is carried by the fully up to date retailer, their sales are very light indeed.

The many examples given bear out this contention. Quotations are taken from the actual experience of certain retailers in meeting the competition of the catalogue houses. The following comparison is given to show that in most lines the local merchant can more than meet the catalogue house prices:

Cat. page. Number and item.	Their price.	Local price.
365—ly1201, parlor table	$1.50	$1.00
349—ly455, reed rocker	3.95	3.00
383—ly2890, wood bed	1.95	1.85
490—23y9506, Enterprise chopper	1.60	1.50
337—28y751, 7 inch shears	.32	.20
460—6y708½, Favorite rifle	5.00	4.75
Cream of wheat	.14	.12½
Force	.13	.12½
Yeast Foam	.04	.04
Best indigo print	.06½	.06
Silver-gray, cotton-fleeced blanket 50x72, 2-lb.	.70	
" " " " 54x76, 2-lb. 2-oz.		.65
Percale, 32 in	.09	.08
Standard marrowfat peas	.10	.10
Arm & Hammer saleratus	.06	.06

A recapitulation of the sound advice given in "The Retail Mail Order Problem" shows, among other things, the following terse truisms:

Treat the catalogue problem purely as a personal one and one that will remain unsolved only so long as personal effort to solve it is omitted. Recognize that your customers insist on regarding retail mail order house competition as legitimate; make a virtue of the necessity and proceed to acquire a thorough understanding of that competition preparatory to meeting it intelligently. No longer let the "baits" of retail mail order houses lead you to forget their extraordinary expenses, to meet which they must make a profit on most of the goods they handle. Acquire that full knowledge of catalogue methods which will make you cease to fear and simply respect them. Recognize that success in merchandising is becoming day by day more a question of quick sales and short profits. Compile a "mailing list of information" about the people in your district. Look upon every dollar of capital as a general might view every soldier in an army, and keep it constantly on the move. Discount bills and, so far as possible, sell for cash. Let your bargains be genuine bargains, being willing sometimes to sell even at a loss. Be as bold in asking profits on the many regular items as you are in foregoing profits on the few bargain items. Rid yourself of "stickers" by displaying

them and cutting their price over and over again until you have them off your shelves.

The book is in no way an advertisement of its publishers' business. It is issued with the intention of helping the retail merchant who does not buy from Butler Brothers as much as the retail merchant who does buy from them, and with the object of assisting the wholesaler in general as much as to help Butler Brothers. The whole idea is to present the remedies for the problems discussed in a way which will help the retailer and the wholesaler alike in an honest and aggressive fight with the retail mail order houses for business supremacy. It contains a fund of information which you should have, and which you can get for the asking. There is no other manner in which you can better equip yourself for the solutions of the problems with which you are confronted than by a study of its pages.

The progressive dealer, the wide-awake merchant, the man who thinks for himself, will find in it stimulation which he will, being a student of conditions, appreciate. The merchant who does not possess these qualities, who is of the class which rails the hardest against the catalogue houses where he should be, instead, engaging them in an intellectual combat, positively must have the information it contains for his very self-preservation.

RETAIL HARDWARE DOINGS.

NEW FIRMS AND INCORPORATIONS.

Ceresco, Nebraska—John A. Carlson.

Bloomington, Nebraska—L. A. Siegel.

Swedeburg, Nebraska—Theo. Heurline.

Orlando, Oklahoma—Orlando Hdw. & Implement Co.; capital stock $5,000.

Snyder, Oklahoma—Snyder Hardware Company; capital stock $15,000.

Post Falls, Idaho—J. F. Enders.

Bottineau, Minnesota—A. W. Lund.

Manhattan, New York—Manhattan Electrical Range Co.; capital stock $30,000; incorporators are Henry Sampson, George S. Lincoln and others.

Antigo, Wisconsin—Lewis Hardware Company.

Pesotum, Illinois—Mr. Ogden and Joseph Grostephalt.

Knoxville, Illinois—Enterprise Novelty Manufacturing Co.; capital stock $10,000; directors are R. L. Wilson, president; W. G. Stone, vice-president; C. R. Dihlblad, secretary, and Frank Mattson, treasurer.

Salina, Kansas—W. P. Pierce.

Guthrie, Oklahoma—Electrical Tool Company; capital stock $100,000; incorporators are Alex Senper, J. Francis Bacon and F. H. McGuire.

Alexandria, Minnesota—A. H. Christenson.

Allentown, Pennsylvania—J. Wesley Wagner and H. T. Trumbower.

Cambridge, Ohio—H. F. McDonald.

Ann Arbor, Michigan—Wm. A. Schneider and A. H. Allmendinger.

Rome, New York—Rome Stamping Co.

Elk Creek, Missouri—A. B. Nall.

Asheville, North Carolina—C. F. Christopher.

Ithaca, New York—Treman, King & Company.

Unity, Wisconsin—Lester Mumbrue and Frank Button.

BUSINESS CHANGES.

Plattsmouth, Nebraska—Kroehler Brothers succeed Kroehler & Vetesnik.

Earlville, Iowa—Staehle & Company succeed George Staehle & Son.

Neosha Falls, Kansas—Lite & Young succeed J. H. Mecum.

Blythedale, Missouri—Baker, Smith & Ellington succeed Baker & Ellington.

Muskogee, Indian Territory—Reeves & Trumbo succeed The Saddler Hdw. Co.

Attica, Kansas—Jones & Smith succeed Voorhees & Jones.

Belpre, Kansas—J. L. English succeeds T. E. Hardy.

Chanute, Kansas—Chanute Hardware Company succeeds Bales & Prang.

Aliceville, Kansas—G. H. Ellis succeeds Lee & Miller.

Clarence, Missouri—J. W. Dry succeeds J. S. Barr.

Liberty, Nebraska—P. Bowshay succeeds J. E. Martin.

Logan, Kansas—H. F. Bashford succeeds the Logan Hardware Company.

Glidden, Iowa—Henry Losshen & Company succeed Geo. W. McNaught.

Williston, South Dakota—West & Rawson succeeds West & Woodman Hardware Co.

Spencer, Iowa—Halver Lee and E. C. Curtis succeed Chas. H. Copley.

Keosauqua, Iowa—H. Blackledge succeeds Leaverton & Fuller.

Adrian, Michigan—Wyer & Dumble succeeds C. A. Sands.

Henderson, Michigan—S. J. Redford succeeds Convis & Son.

Condersport, Pennsylvania—Albee Seltz succeeds Elmer Hardware Company.

Neola, Iowa—R. V. Churchill succeeds Evan Phillips.

Marshalltown, Iowa—Harry Webbles succeeds B. Robinson & Company.

Bedford, Iowa—Willis & Hook succeed the Corner Hardware Company.

St. Paul, Nebraska—Otto Peterson and I. I. Ward succeed A. J. Bollinger.

Lostowell, Canada—Fred Howes succeeds Zilliaz & Sarvis.

Dodge Center, Minnesota—John Anderson succeeds M. A. Race.

Fort Wayne, Indiana—Goeglein Brothers succeed Romarys, Goeglein & Company.

La Crosse, Wisconsin—E. C. Josten succeeds C. S. Cone.

Alma, Kansas—D. O. Robertson succeeds Taylor Brothers.

Hillsboro, Minnesota—C. L. McDavid Company succeeds Barringer-McDavid Hardware Company.

Rollo, Missouri—William Walker succeeds Charles F. Love.

Oregon, Missouri—E. R. Suppe succeeds J. S. Parker.

Tolono, Illinois—William Charles and Justin Crawford succeed Wm. H. Jaques.

MISCELLANEOUS.

Belle Plaine, Kansas—F. C. Crowell; destroyed by fire.

Alliance, Ohio—Alliance Hardware Company; new buildings.

Alliance, Ohio—McCaskey Register Company; destroyed by fire; loss $25,000; fully covered by insurance.

Paton, New Mexico—Hobbs Hardware Company; destroyed by fire.

Belleville, Illinois—Quality Stove & Range Company; capital stock increased from $20,000 to $40,000.

Belding, Michigan—Otto Kuhn; bankruptcy.

Belvidere, Illinois—George Greenlee, Senior; deceased.

Huntington, Kentucky—Emmons-Hawkins Hardware Company; burglarized.

Fond du Lac, Wisconsin—Wm. Weddle; new building.

Newton, Kansas—H. K. Klinger; deceased.

Pocatello, Idaho—Ben Dean, burglarized.

Boston, Massachusetts—Benj. Dyer Washburn; deceased.

Guthrie, Oklahoma—New York Hardware Company; destroyed by fire.

Mount Olive, Mississippi—W. E. Wade; destroyed by fire.

Stanhope, Iowa—Peter Hove; new building.

Sebring, Ohio—Leonard Hardware Company; new building.

Advertising Department

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

The Jay Swern advertisement is very pleasing. It is well written and the printer secured the best possible results in the use of type. The argument

We have a full line of
HARDWARE

bought before the raise, and can offer you some bargains that will surprise you at their cheapness.

We also have a good supply of barbed and smooth wire. If you want to build a new fence or repair that old one come in and get some.

JAY SWERN.

The only exclusive Hardware Store in Marshall.

"bought before the raise" is strong and might have been bought up to catch the eye more effectively. The heading is open to some criticism. The word "hardware" is essential unless some equivalent can be introduced, but to make the statement that "we have a full line of hardware" is merely saying what people have a right to expect of you. It would have been better to have specified some seasonable article in the heading, for instance, the barbed wire. This would immediately catch the attention of every farmer who had a fence in bad repair. The word "hardware" could have been introduced in the middle of the advertisement in black-faced type.

The advertising writer for Bleakly's hardware store believes in the use of plenty of white space in his ad-

Don't Buy a Separator

until you have examined

The
Tubular

Call and see it at

Bleakly's Hardware Store

H. C. GOODYEAR, Manager.

vertisement. We fear, however, that very few readers will be persuaded to delay buying a separator by this advertisement. The introduction of a few snappy reasons for the purchase of the "Tubular" would vastly strengthen the ad. The advertisement is well balanced and attractive in appearance and the use of the cut is good. This heading is also open to criticism. When writing a heading, remember that this is the first point in the advertisement which you want your readers to notice and upon the impression made by this first glance depends much of the value of the advertisement. The suggestion "don't buy a separator," while it might not persuade many people to do without one if they really want it, is, generally speaking, poor advertising. It would be better to say "When buying a Separator, examine the Tubular."

George P. Griffin, in his advertisement, has handled a difficult matter in a very satisfactory way. The "Gillette Safety Razor" portion is, in itself, a good advertisement, well written and well displayed. To

Gillette Safety Razor
NO STROPPING. NO HONING.

Set consists of 12 double-edged blades (24 keen cutting edges) with triple silver-plated handle, in velvet-lined case. **20 to 40 shaves from each blade.** Blades never have to be sharpened. Ask your dealer or write for free illustrated booklet.

GILLETTE SALES COMPANY, Times Bldg., Times Sq., New York.

How About
A NEW RANGE
This Spring

We are showing a combination of gas and coal range that is fine. During the month of April we will make very liberal terms.

The Round Oak Chief Range

is the best range made and we can prove it

GEO. P. GRIFFIN

Agent in Albion for Gillett Safety Razor

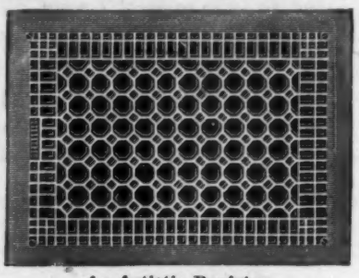
work it in combination with the rest of the advertisement is not an easy matter, but Mr. Griffin and his printer have accomplished the task very creditably. We would suggest, however, that in writing the matter about the Range Mr. Griffin would have done well to take a lesson from the Gillette folks. They have condensed considerable important information in a few lines. A man who reads those few lines either has his mind made up to buy a Gillette or has his curiosity whetted about as sharp as a Gillette blade. A few lines of explanation about the advantages of the combination gas and coal range would add immensely to the advertisement. The effect of carrying out the display in the same style type is good and if this idea had been followed with the body type, it would have made it all the better. Nevertheless the type balance is strong. The advertisement has an individuality which makes it easily noticed by the eye.

Heating and Ventilating

MOORISH FLOOR REGISTER.

Half the satisfaction given by any heating job rests in the appearance of the registers in the rooms to be heated. A well furnished parlor or dining room may be almost ruined from the decorative standpoint by the use of registers which are incongruous and not in harmony with the rest of the room's fittings either in color or design.

This point is realized fully by Henry & Scheible Company of Cleveland, Ohio, and they have on hand a line of registers which are equal in every respect to



An Artistic Register.

the high standard set by their furnaces. We are illustrating herewith a Moorish floor register which is of a classic design with large air openings and which possesses features of beauty through its very simplicity.

This firm manufactures a full line of registers, faces and borders in electro-plated nickel, or bronzed in gold, silver or copper; convex registers, convex square registers, convex circular top registers, round registers, etc., etc., and are in a position to meet requisitions in every particular. When writing for information as to prices, etc., do not forget to mention THE AMERICAN ARTISAN.

FIRST NUMBER OF THE "BULLETIN."

Number one, volume one, of the "Bulletin," which will be published "at intervals" by the Anti-Dust-and-Draft Ventilator Company, Chicago, Illinois, is off the press. Miriam Goodhue Lynch is editor.

The leading article announces that ventilation is becoming quite a fad since the physical culturists and other sanitary minded folks have been raising such a howl against the reckless spreading of disease resulting from the lack of ventilation in crowded public halls and cars.

It is stated that the Anti-Dust-and-Draft Ventilator Company manufactures the only scientific ventilating device known, because it gives more ventilation at the top than at the bottom of a window, thus causing a constant circulation of air and no draft.

What owners will be first to advertise filtered air in a hotel, in a restaurant, in a model flat or in passenger cars, they ask? Only one can be first. "All the people want pure air some of the time—wise folks will have it all of the time."

The expert on scientific ventilation of this company is William Henry Lynch, the inventor. Mr. Lynch has an enviable reputation as a scientific expert in his line and many items of commendation are quoted from people who know in reference to his work.

The dealers are aware that ventilation is becoming more and more considered by everyone, and they will do well to request the receipt of every issue of the "Bulletin." When writing, kindly mention THE AMERICAN ARTISAN.

RADIATOR VALVE.

The "K-M-C" Packless Diaphragm Radiator valve shown in the acompanying cut is manufactured by the Kellogg-Mackay-Cameron Company of Chicago, Illinois, who are also makers of a full line of boilers, radiators and heating and plumbing supplies.

The Diaphragm Radiator valve is recommended by its makers for use on all systems. It is especially designed and adapted, however, for vacuum heating and, as it is packless, it is said to do away with the constant care which is necessary to keep tight the stuffing box of the ordinary radiator valve.

This is but one of the many articles of merit which are made by the Kellogg-Mackay-Cameron Company, but it serves as an indication of the high class of goods which they manufacture. The "K-M-C" vacuum system is too well known to need mention. Suffice to say,

Packless Diaphragm Radiator Valve.

it has given satisfaction always and is in use to-day by men who were the first to install it.

When writing to this company you will receive prompt attention by saying: "Saw it in THE AMERICAN ARTISAN."

PARAGRAPHS.

Eben N. Hickley is president of the Universal Ventilator company, a corporation recently formed in Boston, Massachusetts, with a capital stock of $50,000, for the purpose of dealing in ventilators.

Schedules in bankruptcy of the United Heating company of New York City show liabilities of $175,639, of which $45,713 are secured and $72,200 contingent to surety companies on bonds for completion of contracts. The nominal assets are $47,810.

At a recent meeting the Cycle Manufacturing Association and the Association of Bicycle Parts and Accessories held in Buffalo, New York, a committee was appointed to perfect plans for increasing the sale of bicycles which is to be reported at a meeting of the associations to be held in Buffalo, New York, on May 4th. The associations intend to make a united and energetic effort to reawaken an interest in the bicycle trade and to inaugurate a movement to revive the interest in bicycling.

Principles of Intersection.

PART XXXIII. PLATE XIV.

(Copyright, 1906, by Joseph P. Coleman.)

INTERSECTIONS BETWEEN CYLINDERS OF EQUAL DIAMETERS WHOSE BASES ARE CIRCLES.—IMPORTANT INSTRUCTIONS FOR JOB WORKERS.

In the "sheet metal" trade a cylinder is generally considered as a round pipe, so in the description of this plate we will call each cylinder a pipe with a circular base. The illustration on this plate shows how to obtain the pattern for a tee-joint, a square elbow, an octagon mitre pattern, all on one system of lines, as shown in pattern sheet. The two tee-joint patterns form two square elbow patterns crossing at O-O. The pattern for the intersection between the inclined pipes and the horizontal pipe, can be utilized to make various articles.

Cut out two pieces of sheet metal from the pattern. One end can be cut square.. Join the metal at the lines T-T. Connect the two pieces by that portion of the pattern from O to T on each side of the center. The angle when joined will be 35 degrees, the opening at joint will be equal to the diameter of the pipes, measuring across one way. The other part of opening will be a little wider, so as to make a Y joint. The straight pipe must be enlarged at one end. If you draw the inclined pipe at an angle of 60 degrees, the pattern from the intersection with the horizontal pipe can be used to make a Y joint of 60 degres. As the pipes are of equal diameter, you can cope one pipe on the other.

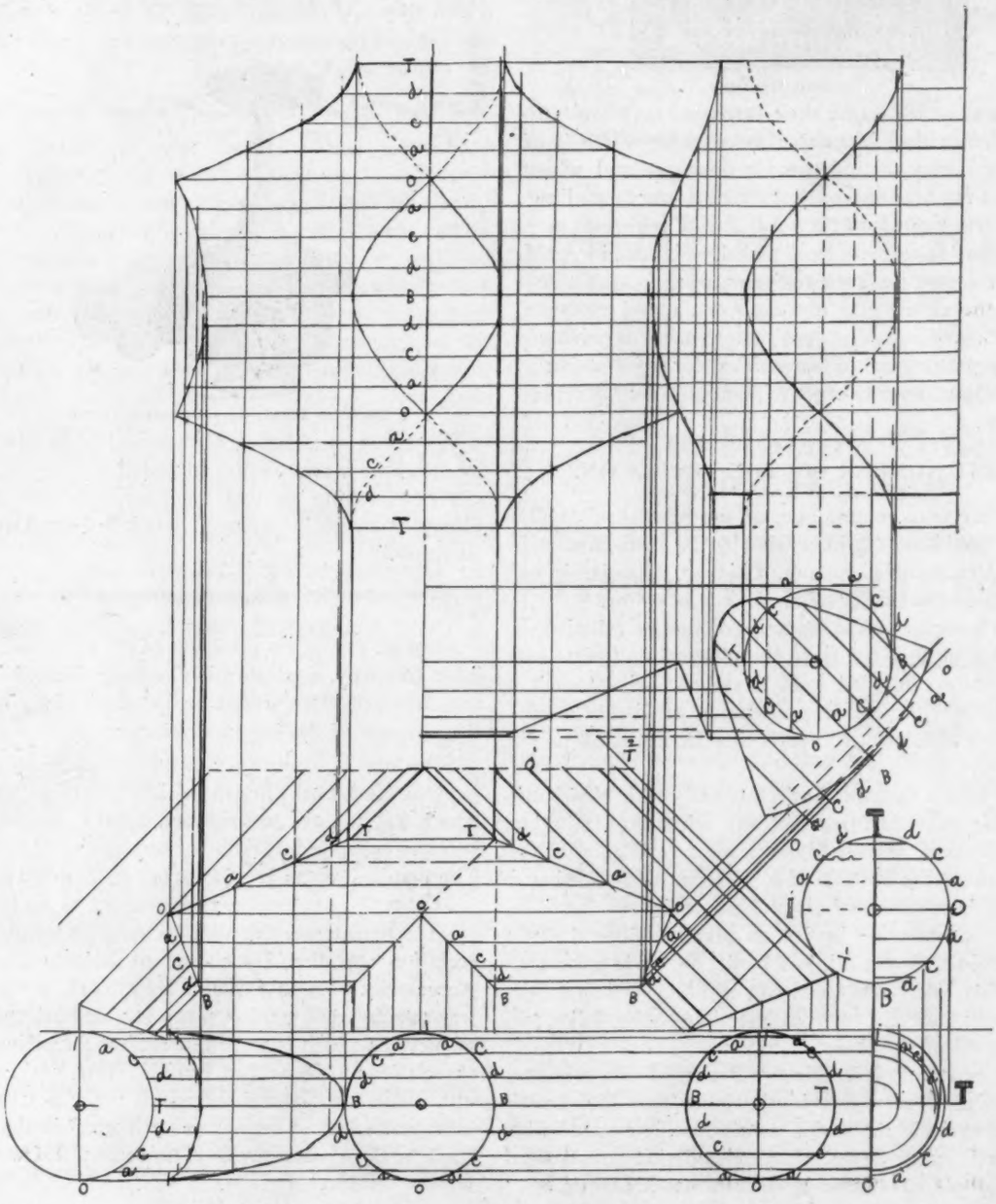


PLATE 14.—SOLUTION OF THE PROBLEMS.

Draw the horizontal line as shown, dividing the plan and elevation. This line is called the ground-line. The letters G L are omitted by a mistake. In not being inked, the letters were erased in preparing the plate.

Construct the plan of the bases of the three pipes, and mark the letters as shown in the plan. Draw the elevation of the inclined pipes half-pitch, 45 degrees, as shown T1-T2, and the short pipe at base. The mitre line at T1 is 22½ degrees octagon mitre cut, as shown in plate 12, line b-F. Now draw the elevation of the tee-joint at center, to join the horizontal pipe B-O-T, and intersect in the straight lines B-d-c-a-o. The other line is not lettered. Draw the horizontal line at top of the inclined pipes as T-O. The intersection of the inclined pipe to the right of the horizontal pipe is indicated by the straight line B-d-c-a-o and the straight line o-a-c-d-T, as shown. At the right of the inclined pipe draw the vertical line O-B-T. This line is an axis to revolve the right section of the horizontal cylinder on the surface of the paper. The revolution is best understood by considering the vertical line as a damper rod and the circle as a damper in a round pipe. Take the poine -O- on the center of the line Ti B and describe a circle T O-B-I, representing the right section of the horizontal pipe revolved on the paper. Space the points of division B-d-c-a-O-a-c-d-T on the circumference of the circle as shown. Those points of division are spaced by using the 45-dgree and the 22½-degree triangle.

Draw the horizontal lines through the points of division on the circumference of the bases of the three pipes. Those points are spaced by using the 45-degree and the 22½-degree triangle. Letter the right hand base by the letters O-a-c-d-T d-c-a-i-a-c-d-B-d-c-a-o. The center base is lettered O-a-c-d-T d-c-a-i. Draw lines through the points B-d-c-a-o-a-c-d-T on the circle B-O-T- to intersect horizontal line T-T- in plan, in points not lettered. Draw the semicircle in the plan at the extreme right of plate O-Ti-I. Revolve the points on the line T-T to intersect the line O-I by describing the semicircles as shown in plan. You will notice the notation employed, O-T-B-I. The letter O means outside point; I- inside point; B- bottom; T- top point. This was done to avoid confusion in the work caused by revolution of the points. T- in elevation is at the top of circle after revolution is on the outside of circle on the center line, T T in plan. I- in elevation was on a horizontal; after revolution on a vertical line, O-I in plan, and on the inside part of the circle. O- in elevation was on the outside of the horizontal line; after revolution is found on the outside of the vertical line. O-I in plan. You see, revolving a quadrant from the vertical plane to the horizontal changes a horizontal line to a vertical position, and all the points on the line are also changed. Only one-half of the circle is shown in plan after revolution, as o-a-c-d-T. d-c-a-I.

Draw lines through the letters o-a-c-s-T and o-a-c-d-B, to intersect the octagon mitre cutting line at the base of the inclined pipe to the right of plate, continue the lines to intersect the horizontal line at top of the inclined pipes. Those lines in the inclined pipe are drawn parallel to the axis O-O, as shown, and intersect the horizontal pipe in points B-d-c-a-o-a-c-d-T.

HOW TO FIND THE PATTERNS.

Construct the vertical pattern line and space the points indicated by the letters T-d-c-a-o-a-c-d-B-d-c-a-o-a-c-d-T. Draw horizontals through the points establishing the pattern sheet as shown on the plate, to lay out all the patterns. According to the notation, the letter B is on the center line of pattern sheet. The letters T-T are the outside lines to join the forming up, and when formed and joined the lines T-T are on the top of the horizontal pipe as shown; B- is at the bottom in elevation and in the right section cut, as shown by T-B.

HOW THE LINES INTERSECT.

Commencing with O, descending to B, ascending to T, line through O in elevation intersects o-o in pattern sheet. Line through A in elevation intersects a-a- in pattern between points o-o. Line through C in elevation intersects c-c- in pattern between points o-o. Line through d in elevation, intersects b-b- in pattern between points o-o. Line through B in elevation, intersects B, center line of pattern sheet. Join the points on the pattern sheet, forming the curve at center part of pattern. Line through a in elevation, intersects a-a between points O-T on pattern. Line through C in elevation, intersects C-C between the points O-T in pattern. Line through T in elevation, intersects lines T-T in extreme lines in pattern. Join points completing the pattern for the intersection between the horizontal and the inclined pipes as shown on pattern sheet. Notice that points O-O are half way between T- and B on pattern sheet.

TEE JOINT PATTERN.

Notation is similar, line O intersects line O-O in pattern. Line through a intersects a-a- between O-T and a-a- between O-O and pattern. Line through c intersects c-c- between O-T and c-c- between O-O in pattern. Line through I intersects d-d- between o-T and d-d- between O-O in pattern. Line through B intersects B at center and T-T, extreme lines in pattern. Join points completing pattern for the intersection between the vertical and horizontal pipes at center of elevation, as shown in pattern sheet. In a tee joint intersection, there are four intermediate points of intersection between the pipes—two in front and two in back of pipe. In all intersections between pipes, I always used this notation and divided a circle into eight, twelve or sixteen parts, according to size.

TWO PIPE COVERING CONTRACTS FOR HOTELS.

The H. W. Johns-Manville Company, through their Philadelphia branch, recently completed two of the seasons's largest contracts for the installation of their various pipe coverings in the plants of the hotels—The Marlborough-Blenheim and The Denis, Atlantic City, N. J. In the plant of the former all the hot, salt and fresh water pipes are covered with their "J-M" moulded, and all steam pipes with their well known "J-M" 85 per cent magnesia covering. In The Denis the entire heating system is covered with "J-M" three-

ply asbestos air-cell covering, and high-pressure work with 85 per cent magnesia.

In the placing of these contracts none but manufacturers of the highest reputation were considered, and the H. W. Johns-Manville Company are to be complimented on securing these orders in the face of such keen competition.

The coverings referred to above are only a few of the many standard coverings manufactured by this company, which has recently gotten out a very neat and attractive booklet entitled "Pipe and Boiler Insulation," in which these materials are fully illustrated and described. A copy will be sent to interested parties for the asking, if mention is made of THE AMERICAN ARTISAN.

AN UP-TO-DATE MAIL BOX.

A strictly up-to-date mail box which is full of satisfaction-giving points is the Twentieth Century mail box number one of Heise & Brauer, 63 Union Park Court, Chicago, Illinois. The tastefulness of its design can be readily seen from the accompanying cut.

20th Century Mail Box No. 1.

This box is constructed of number twenty galvanized steel and is guaranteed not to rust or break. It is so made that the contents cannot be removed without the keys. There is a heavy glass panel in the door through which letters, etc., can be seen and a brass clip inside which will hold the card on which the owner's name is printed. The slot at the top of the box in which the carrier inserts the letters is protected by an extra hinged cover. A spring is inserted at the back of this cover which forces it forward after the pressure of inserting the letters is removed. These boxes are painted with the very best of aluminum bronze with red lettering, which gives a general resemblance to the United States mail box. A very convenient feature are the springs for holding papers, etc., which are too large for insertion. These boxes are fitted with a spring lock and have two keys.

When writing to the manufacturers say, "Saw it in THE AMERICAN ARTISAN."

A NEW PRICE LIST.

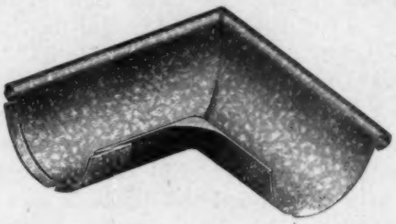
The Victor Stamping Company, manufacturers of Victor coal hods, wash tubs, pails, tin and galvanized ware, Loveland, Ohio, have withdrawn all previous prices on certain of the articles of their manufacture and are sending a new list to the trade.

Additional equipment has recently been added to their manufacturing facilities and they are in a position to promise prompt shipment and a greatly increased output. Liberal discounts from the new price list are made for carload lots. It is unnecessary to make any statements concerning the class of products of this company because they are so well known to the trade that they speak for themselves.

When writing for this new price list and other information, you will secure prompt attention by mentioning THE AMERICAN ARTISAN.

ONE PIECE MITER.

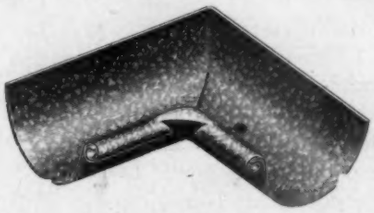
The J. E. Whitacre Manufacturing Company of Rockford, Illinois, manufacture the improved one-piece miter, an article that is hailed by all tinners with joy. With its use there are no more broken corners



to repair after the job has been left, and no more stopping to make over or brace the commercial miter, which is a great saving in labor. Nothing but the very best galvanized iron is used in the manufacture of this miter. It is of the standard size in either single or double bead, lap or slip joint, inside or outside turn as shown in the cut and is more roomy than is usual at the bend, thus giving the water a chance to make the turn without overflowing.

These miters are made from one piece of metal and are galvanized or tinned after being formed and they fit all standard gutters.

This is an article for the class of tinners who are



satisfied with nothing but the most conveniently formed material. You are in that class, Mr. Dealer, and the J. E. Whitacre Manufacturing Company would like to be in a position to tell you more about these miters. Drop them a line and mention THE AMERICAN ARTISAN.

DEFY THE WIND.

During the persistent and shifting winds of spring the demand for protection to chimney tops and stacks is always great and customers are glad to have their attention called to a practicable fixture. The Powers' Automatic Chimney Top and Ventilator is made on scientific lines. It stops rain, smoke and soot from blowing down the chimney. The wind blowing past the sides of this cover and not through the cover creates a vacuum and increases the draft.

Powers Brothers, Streator, Illinois, who manufac-

ture the Automatic Chimney Top, will gladly send you full information. When writing kindly mention THE AMERICAN ARTISAN.

TIN ROOFS FROM THE PRACTICAL STANDPOINT

The following article is written by a practical tinner who combines with his knowledge of his trade the faculty of expressing a vital subject in an interesting and instructive manner.

Probably a great many readers of THE AMERICAN ARTISAN have met with conditions similar to those mentioned by our correspondent. It is certain that all tinners realize the need of improvement in the tin roofing plates now in general use. The way to obtain the necessary reforms is to let your wishes be known, for manufacturers as well as yourselves would surely prefer to handle a product which gives general satisfaction and brings the amount of business which always accompanies general satisfaction:

To THE AMERICAN ARTISAN:

I have been reading considerable of late about the old charcoal iron plates which our fathers used for roofing. Very little is said about how well or how much pains they took in putting it on.

We all have something to find fault with when we do a poor job. Either the tools, material or something else is at fault. I am not a chemist and cannot say whether or not a plate of steel has something within its nature that is doomed to self-destruction. I do know that a steel roofing plate, when folded and pounded down, is less liable to crack than an iron plate. It lies smoother and works better. As to its lasting qualities, they are undoubtedly much poorer. I think that we tinners are reaping the harvest we have sown. We are the victims of our own boomerang. We wanted to get the job, oh, so badly. The other fellow could buy the same grade of tin that we could buy and at the same price. He could skim the solder as well as we.

So we asked the manufacturer for a lighter coating. We got it. The other fellow got it in the next order. So we made a search for a still cheaper plate and it was shaved again. Now something must be done.

Palm oil costs too much. The manufacturer found that an acid plate sold well because he could sell it at a low price. The result is that now no one wants a tin roof at any price because every one has had trouble with them. I don't know whether it is the acid used to coat the tin or the properties of the steel itself which eats it up.

Competition has also had its effect on the quality of workmanship. I have seen men lay from five to eight squares of roof in a day—and finish it? Yes, until the rain or the next spring comes.

What is the trouble with the roofing business today? Cheap John acid plates, eight squares a day, half enough solder not properly applied. We are after the job and we will cover any kind of sheeting. My competitor covered a building, sheeted with green oak lumber, and within sixty days the man had to put on a new roof. No more tin roof for him or his neighbors. Who was to blame? The customer did not know that the acid in the green oak lumber would eat up the tin, but the tinner should have known. The other day I was called to repair a roof. When I got on the building, I found the roof sagged in the center and water standing in a puddle upon it. When I went to wipe the water off, I took the rust along with it. I went down and telephoned the owner to come. When he came he did not have a good word for a tin roof. After explaining that the roof had rusted out because of the lack of proper pitch, he had a carpenter come and fix the roof. When I went to put on the new roof, did I have pitch enough? Just four inches to the foot. I explained to the carpenter to put a projection for the eaves trough, which he did. If the tinner who laid the roof before had asked for more slant, he might have saved the reputation, to a certain extent, of the cheap, poorly soldered, half-laid tin roof he used.

My experience has taught me that a palm oil plate, properly nailed with light nails to the sheet, and four or five pounds of solder to the square, laid on smooth dressed surface, without wide cracks and holes, at a proper pitch, gives good satisfaction if properly painted with Venetian red and linseed oil.

Yours truly,

Edmore, Michigan. "PURPLE."

TIN FROM STRAITS SETTLEMENTS.

Consul-General Wilber furnishes from Singapore the statistics of tin exports from the Straits Settlements to the United States and suggests a mutual trade benefit. His letter reads:

"The total shipments of tin from the Straits Settlements for 1905 amounted to 63,710 tons, 18,905 tons going direct to the United States, 35,294 tons to England, and 9,511 tons to continental Europe. A small falling off in exports to the United States was caused by the high rates of exchange and by the advance in freight rates during October, November, and December by the New York shipping conference. The shipments to England the past two years materially increased, while those to the Continent gained gradually during the past four years. Many indirect shipments for the United States go from Singapore to England and the Continent which if shipped direct would materially increase the declared exports of tin to America from this region and cause more return cargoes of merchandise."

TIN PLATES FROM STEEL ARE GOOD.

To THE AMERICAN ARTISAN:

It is unfortunate that in a paper of the standing of THE AMERICAN ARTISAN such statement should appear as shown under issue of the 7th inst. in the article "Better Tin Plate," as the following:

"It was the adoption of Siemens-Martin Open Hearth Steel by the American industry that the very unsatisfactory condition arose."

It is just such statements as this with similar lack of knowledge of actual conditions that unquestionably has caused much of the trouble in unsatisfactory showing of tin roofs. Nothing has appeared more evident in connection with this discussion at both the Milwaukee and Baltimore conferences, and also in the articles appearing from time to time in trade papers than the fact that most of those giving their opinions are either simply guessing at the situation or voicing the views of some alleged experts, who are equally ignorant. It would appear absolutely necessary that the situation only be properly covered by the truth and facts. Any one who will take the trouble to investigate can find for a considerable period of

years, say from about 1875 until the establishment of the tin plate industry in this country, all of the Welsh Roofing Tin Plate used which gave such eminent satisfaction was manufactured from Siemens-Martin Open Hearth Steel. Many thousand roofs all over the country to-day in as good condition as when applied in the seventies and eighties are most excellent testimonial to the lasting wearing qualities of these steel base roofs. It can also readily be determined that the Welsh makers of these good roofing tin plates at all times discountenanced the use of Bessemer steel as a base. A large part of the difficulties occasioned by roofs of the persent time unquestionably arise from the use of Bessemer steel. In other words the situation is exactly the opposite to that expressed in your article of April 7th.

Since the operation of our new mills, which were started in 1904, for our "Scott's Extra Coated" and "Follansbee Banfield Process" Ternes we have used nothing but a very selected quality of special open hearth steel. There is as much difference between this product and the ordinary Bessemer used for tin plate purposes as between day and night. We accordingly are now in the third year in which we have been pursuing the methods of the successful old Welsh manufacturers, whose brands were commended the country over for their lasting wearing qualities.

Knowing this situation without any peradventure, guess, inference or other mistaken idea, we at the present time have in course of construction open hearth steel works which will be in operation within a few months and supply direct under the one plant in our own individual organization all the raw material required for our own mills producing our high quality Roofing Tin Plate.

We trust you may see your way clear to correcting the misstatements in article of April 7th, as above pointed out.

Very truly,

Pittsburgh, Pa. FOLLANSBEE BROTHERS CO.

NOTES AND QUERIES.

ICE MAKING MACHINERY.

From Rummel & Oler, Dows, Iowa.

Who manufactures ice making machinery?

Ans.—Vilter Manufacturing Company, Milwaukee, Wisconsin.

DANVILLE STONE COMPANY'S REPRESENTATIVE.

From H. F. Whitney, Manchester, Iowa.

Please tell me who represents the Danville Stove Company in Chicago.

Ans.—W. D. Sager, 38 Michigan street.

SHEET METAL SCHOOLS.

From K. E. King, 1515 High street, Logansport, Indiana.

Please give me the name of a school which teaches sheet metal pattern drafting and cornice and skylight work.

Ans.—International Correspondence Schools, Scranton, Pennsylvania.

ELLIPTICAL HOG RINGS.

From O. W. Johnston, Marshall, Mo.

Where can we buy the Elliptical Hog Rings?

Ans.—Wells and Nellegar Co., Chicago.

FOLDING BATH TUBS.

From Harder & Eeuerbach, Stanwood, Iowa.

Where can we buy a folding bath tub and water heater for same?

Ans.—The Moseley & Pritchard Mfg. Co., Clinton, Iowa.

DROP FORGINGS.

From A. Graff, Wellington, Kansas.

Who makes drop forged or high grade malleable hubs for an all iron or steel wheel?

Ans.—Page-Storms Drop Forge Co., Springfield, Mass., and Edmonds-Metzel Co., 153 S. Jefferson, Chicago.

GLASS PUBLICATION.

From A. T. Trentlage & Son, Milwaukee, Wis.

Please advise us if there is a publication pertaining to the glass industries.

Ans.—The Glass and Pottery World, 358 Dearborn street, Chicago.

KNITTING MACHINES.

From Rud Ruppenthal, Hilbert, Wis.

Where can I buy family knitting machines?

Ans.—John E. Woodhead, 100 Twenty-second street, Chicago, handles the Lamb knitting machines.

ITEMS.

The A. Geisel Manufacturing company has purchased a plant in St. Louis, Missouri, on which will be erected a factory for making stamped and enameled ware.

The Twinco Stamping Works have been incorporated at New York City and will manufacture tools and carry on a brass founding and metal stamping business.

The Gem Manufacturing Company has been incorporated in Boston, Massachusetts, with a capital stock of $50,000 and will deal in tin ware, etc. W. P. White is president and treasurer and Samuel Bailen is clerk.

Follansbee Brothers Company of Pittsburgh, Pennsylvania, are keeping before the trade by sending out a blotter on which is stated that they manufacture roofing, all kinds of high grades a specialty. They also draw attention to their tin plates.

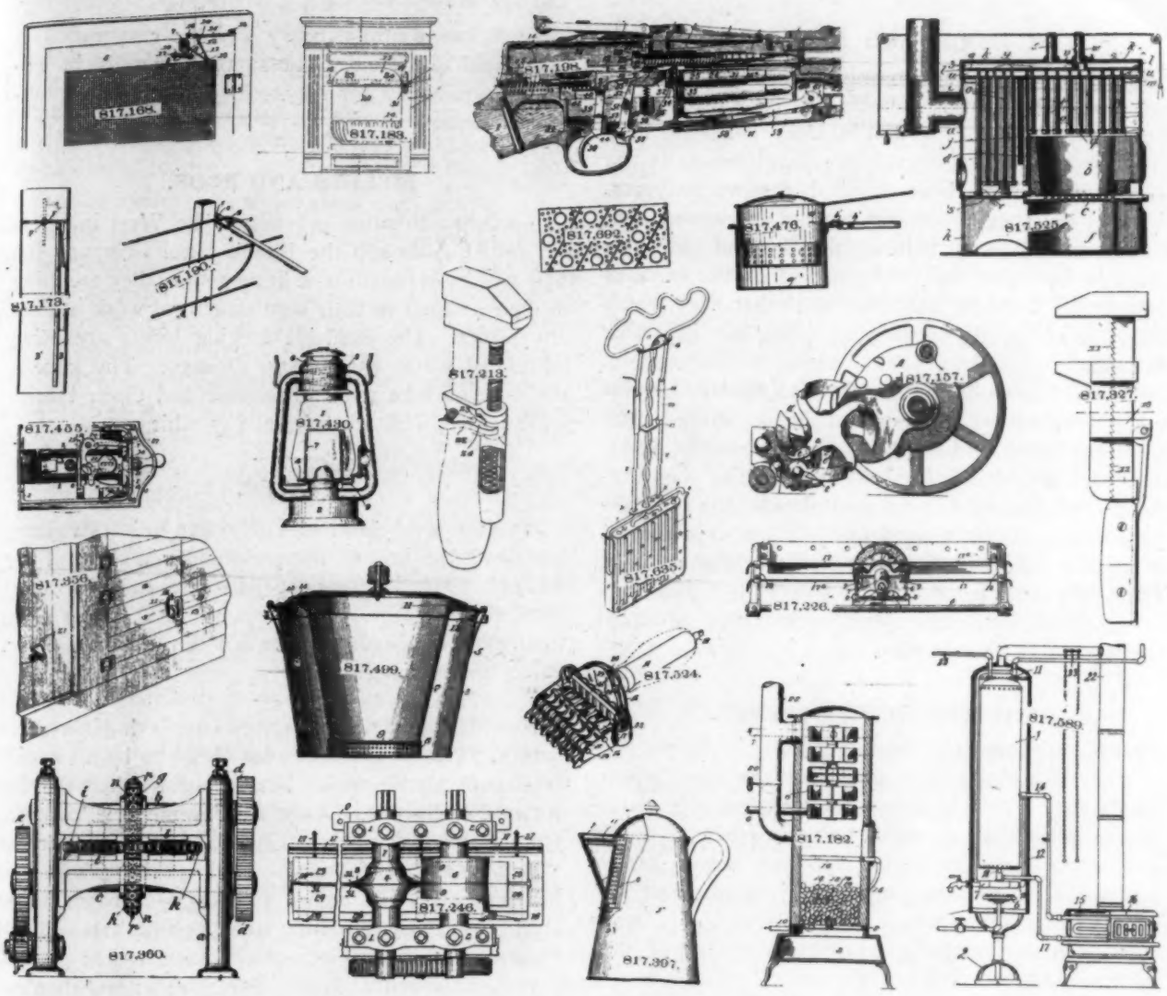
The Parkersburg Iron & Steel Company of Parkersburg, West Virginia, manufacturers of sheet iron and sheet steel, are keeping before the attention of the trade with a tasteful blotter on which is printed matter setting forth in a concise manner the products they handle.

Consular reports show that in Australia steel and galvanized iron roofing is being rapidly succeeded by roofing tiles. The import duty on these tiles is fifteen per cent. Up to the present time France seems to have had a monopoly on this trade. The imports in 1904 were $36,000.

Turkish import figures, which have recently been given publicity, show that during the year 1904 and the first half of 1905 there was imported into that country more iron and steel than ever before. The Belgium products were largely used, as they were sold more cheaply in that market than products from other countries.

John A. Knisely, Sr., member of the roofing and sheet metal firm of Knisely Brothers, died at his residence in Chicago, Illinois, on April 16th, after a short illness. Mr. Knisely was one of the representative merchants in his line in the West. He was a member of the Builders' Club, the Sheridan Club, the Chicago Athletic Association and the Washington Park Club. Mr. Knisely was born in 1863. He is survived by a widow.

NEW PATENTS.



817,157—Lawn mower. William H. Coldwell, Newburgh, N. Y. Filed Dec. 11, 1905. Serial No. 291,329.

817,168—Door spring. Daniel S. Flory, North English, Iowa. Filed June 26, 1905. Serial No. 267,071.

817,173—Heating apparatus. Charles F. Jenkins, Washington, D. C. Filed May 11, 1905. Serial No. 260,039.

817,182—Stove. Frank D. Moses, Trenton, N. J. Filed Aug. 25, 1904. Serial No. 222,079.

817,183—Damper. James R. McCord, Jackson, Ga. Filed May 8, 1905. Serial No. 259,466.

817,190—Wire stretcher. George W. Riker, Russell, Iowa. Filed Nov. 4, 1905. Serial No. 285,808.

817,198—Gas operated firearm. Morris F. Smith, Philadelphia, Pa., assignor of three-fourths to William D. Condit, Des Moines, Iowa. Filed April 27, 1904. Serial No. 205,226.

817,213—Wrench. William H. Zachary, Maysville, I. T., assignor of one-half to David R. Mitchell, Maysville, I. T. Filed Sept. 20, 1905. Serial No. 279,321.

817,214—T square. Thomas Zimmerman, Springfield, Ohio. Filed Dec. 3, 1903. Serial No. 183,561.

817,226—Knife sharpener. Albert L. Davis, Grand Rapids, Mich. Filed June 8, 1905. Serial No. 264,221.

817,246—Metal bending machine. Albert W. Heinle, Crafton, Pa., assignor of one-half to John Noland, Pittsburg, Pa. Filed Jan. 12, 1905. Serial No. 240,685.

817,327—Wrench. Henry C. Land, Altman, Tex. Filed Oct. 5, 1904. Serial No. 227,244.

817,356—Door holding catch. Gust Young, Hallock, Minn. Filed April 14, 1905. Serial No. 255,582.

817,360—Machine for rolling screw nut blanks. Thomas M. Anderson and Roscoe Wormald, Oldham, England. Filed May 15, 1905. Serial No. 260,467.

817,397—Strainer. Nancy E. Skinner, West Lorne, Canada. Filed Oct. 27, 1905. Serial No. 284,664.

817,430—Lever lift for lantern globes. David C. Kline, Rochester, N. Y., assignor to the Pritchard-Strong Company, Rochester, N. Y., a corporation of New York. Filed Jan. 20, 1906. Serial No. 296,980.

817,455—Latch. Warren H. Taylor, Stamford, Conn., assignor to the Yale & Towne Manufacturing Company, Stamford, Conn. Filed April 6, 1905. Serial No. 254,198.

817,476—Cooking utensil. Hermann Elsner, Irvington, N. J. Filed April 4, 1905. Serial No. 253,777.

817,499—Bread raiser. Charles H. Marshall, Brockwayville, Pa. Filed Sept. 2, 1905. Serial No. 276,822.

817,524—Animal shears. James D. Scovel, Detroit, Mich. Filed May 29, 1905. Serial No. 262,739.

817,525—Water heater. Daniel Shaffer, Aurora, Ill. Filed July 15, 1904. Serial No. 216,704.

817,589—Domestic water heater. William H. Roberts, Oakland, Cal., assignor to Roberts Water Heater Company, Oakland, Cal., a corporation of California. Filed May 15, 1905. Serial No. 260,378.

817,635—Egg beater. George R. Flowers, Philadelphia, Pa. Filed Jan. 4, 1905. Serial No. 239,618.

817,692—Radiator. Frank Briscoe, Detroit, Mich., assignor to Briscoe Manufacturing Company, Detroit, Mich., a corporation. Filed March 24, 1905. Serial No. 251,730.

Trade Report.

THE HARDWARE SITUATION.

There is being an unprecedented amount of business done by hardware jobbers generally throughout the country in the staple and builders' hardware line. In many sections of the country this business is the largest which has been handled for many years. There is an especially strong demand for woven wire fencing and poultry netting, the demand being so great in fact that the entire output of the mills is consumed. Builders' hardware and other lines which are affected by the opening of spring are in active demand.

Prices of axes have been changed again. Lippincott's boy-handled three-pound has advanced fifty cents per dozen and the Cutmore boy-handled $1.75. Advances are shown in the Silver Eagle, the Cutmore, the Forest Clipper and the Premier single-bitted axes. Double-bitted axes have also advanced. Wheeler's countersink bits number eighteen have fallen fifty cents per dozen.

Hardware mesh galvanized wire has advanced twenty-five to thirty cents.

IRON AND STEEL MARKET.

There has been an increasing activity in the pig iron market during the past week, with stronger prices, particularly for the lower grades. Cast iron pipe manufacturers bought just about twice as much as in the week preceding. Orders for 200,000 tons were placed last week by western implement interests, and one order of 10,000 tons sold at $13.00 Chicago. Malleable iron continues dull, but good prospective sales of standard rails are reported and the general outlook is now brighter than at any time yet this year. Many inquiries are received for future delivery of malleable but no orders yet. One order was placed in Chicago this week for 10,000 tons basic. The prices thus far are such that will enable the consumer and jobber to make a fair profit. Northern iron is still predominating in the relative amounts of Southern and Northern iron. The serious shortage the Southern mines are experiencing in supplying the demand may yet be general in the whole market, as it looks at present as if the year of 1906 will break all records, both in production and consumption of pig iron.

WIRE PRODUCTS.

Extremely heavy specifications have characterized the wire market during the past ten days, because of the opening this week of lake navigation. This has affected the buying for deliveries in the Northwest. Prices are firm and the prospect points to the largest year yet.

SHEETS.

The demand is good in galvanized sheets with prices firmer than for many weeks. The independent mills are said to be shading prices somewhat on black. Specifications continue heavy and the corporation is still behind on orders. The supply generally in galvanized is sold out for six weeks, and the future outlook is bright.

BILLETS AND RODS.

A peculiar situation prevails in the West in billets and rods. Although the Illinois Steel Company has their new open hearth now in operation, they are using all their product in their own structural work in their new plants. The available forging billets are being contracted for at $35 to $37, Chicago. The same is also true of wire rods. Bessemer and Open Hearth being scarce, with few sales at $37, Chicago.

PLATES.

Mills are still behind with orders on universal plates, but there has been a sharp decrease in demand for sheared. The independent mills are suffering most from the shortage in sheared, but the Illinois Steel Company has hardly a month's run contracted for. Prices are unchanged.

New tonnage and specifications are both of an active nature. Prompt deliveries can be given by almost all producers, for the reason that mills are lightly sold for forward deliveries. A brisk movement is reported from warehouse stocks. Chicago mill prices for car load lots are as follows: Tank steel, ¼-inch and heavier, up to 100 inches wide, 1.76½c base; flange steel, 1.86½c base; marine steel, 1.96½c base; all full extras. Plates 3-16-inch thick, $2.00 extra; gauges, 7 to 8, $3.00 extra; No. 9, $5.00 extra; less than car load lots, $5.00 extra. Store prices are very firm. We quote from local stocks: Tank steel ¼-inch and heavier, up to 72 inches wide 2c to 2.10c; 72 inches to 96 inches wide, 2.10c to 2.20c; 3-16-inch up to and including 60 inches wide, 2.10c to 2.20c; 3-16-inch, 72 inches wide, 2.35c to 2.45c; No. 8, up to 60 inches wide, 2.15c to 2.25c; flange steel, 25c extra; heads, 25c extra.

MERCHANT STEEL.

Orders are now being booked for the last half of the year in Merchant Steel, with specifications contrary to present contracts. Consequently, but small tonnage will be held over into the season. Agricultural shapes have caused large season contracts to be placed. Except for occasional reported shading, no change in prices has occurred.

OLD MATERIAL.

A slight strengthening has been evident in the Old Material market during the present week owing to the sale of 15,000 tons to Western roads a week ago. The expected decline in prices did not take place. Both heavy melting steel and cast scrap have strengthened.

Prices paid per gross ton, car lots, f. o. b. Chicago, were:

Old iron rails	$21.25 to $21.50
Old steel rails, 4 feet and over	16.00 to 16.50
Old steel rail, less than 4 feet	14.00 to 14.50
Heavy relaying rails, subject to inspection, 50 pounds and under	27.00 to 27.50
Old car wheels	19.00 to 19.50
Heavy melting steel scrap	13.50 to 14.00
Frogs, switches and guards	13.50 to 14.00
Mixed steel	12.00 to 12.50

The following quotations are pet net ton:

Iron fish plates	$16.50 to $17.00
Iron car axles	22.50 to 23.00
Steel car axles	18.00 to 18.50
No. 1 railroad wrought	14.50 to 15.00
No. 2 railroad wrought	13.50 to 14.00
Locomotive tires, smooth	14.00 to 14.50
Railway springs	13.50 to 14.00
No. 1 dealers' forge	12.00 to 12.50
Mixed busheling	10.00 to 10.50
Iron axle turnings	11.00 to 11.50
Soft steel axle turnings	11.00 to 11.50
Machine shop turnings	11.00 to 11.50
Cast borings	8.50 to 9.00
Mixed borings, etc.	8.50 to 9.00
No. 1 mill	8.50 to 9.00
No. 2 mill	7.50 to 8.00
No. 1 boilers, cut to sheets and rings	9.50 to 10.00
No. 1 cast scrap	13.00 to 13.25
Stove plate and light cast scrap	10.50 to 11.00
Railroad malleable	13.50 to 14.00
Agricultural malleable	12.50 to 13.00

John McVoy & Co. report that conditions in the Metal Market are very good, and there is quite a strong demand for tinplate and sheets for spot shipment—the advance on tinplate has stimulated buying. It is rumored there will be an advance on galvanized sheets in a very short time; the advance will probably include roofing of all kinds. The price on solder continues to advance, owing to the high market price of tin.

Matthew, Addy & Company will say in their weekly report:

There are no possible complaints to be made regarding the iron business this week. There has been much activity in all quarters. Buying has been on a large and liberal scale. One lot of 10,000 tons of basic has been placed here and other smaller lots of the same kind of iron. The pipe companies have been buying in round lots and mainly for nearby deliveries. Probably the feature of the market has been the movement in Northern irons. These have been sold in considerable volume both in malleable and foundry grades, and for all kind of shipment, both prompt and over the balance of the year. Considerable Southern iron has been sold in this territory, but the tonnage is not so great as that of the Northern iron, which for the past few years has been a much more decided competitor of the South than was formerly the case. In fact, the development of the merchant furnaces in the North has for the past four years been one of the most noticeable things in the trade.

It is very evident that 1906 will break all records both in consumption and production. The rate at which iron is being made and used in America to-day is greater than at any time in the past. This year the trade has not a cloud on its sky. Prices are on a reasonable basis and consumers are able to do business with a good margin of profit. As a matter of fact, in spite of the greatest production the country has known there is danger that there will not be enough iron to meet all demands. Already there is a shortage of the better grades of foundry iron as far as quick delivery is concerned. In Southern charcoal car wheel iron the situation is distressing. There has been and still is a shortage of labor in the South and the charcoal furnaces have been unable to get enough wood cut to keep going; consequently many of these furnaces are six months behind on their orders and there is no immediate prospect of a betterment.

Coke this week has moved slowly. Apparently a good deal of coke was stocked in anticipation of a strike, and this surplus will have to be used up before there will be much more free buying.

The events of the week have put the market on a stronger and better basis and the outlook is distinctly promising.

CONSULAR REPORTS.

American incubators and brooders, according to Consul Dunning, have a field in Lombardy. Poultry is one of the main products, but the stock is deficient in quality and shows lack of scientific methods, both in brooding and feeding. American incubators can get a footing only through personal representation of the manufacturers. An American incubator was tried in one of the agricultural institutes in Milan, but the effort was half-hearted, and as the matter was left entirely in the hands of local officials no successful results came from the tests.

HAD AN ABOUNDING NERVE.

The out-of-town merchant owed the Kansas City house $200 for goods purchased the month previous. The bill was due and a letter was written requesting payment. A letter came back saying that the writer was somewhat short of cash and requesting an extension of ninety days on the bill. The Kansas City merchant wrote another letter saying that he must insist on the payment of his bill and suggested that if the customer was 'hard up" the local bank would undoubtedly accommodate him with a loan of $200, so that the bill might be paid.

In 72 hours the Kansas City man received a reply, which he is carrying around and showing to his friends as a certificate of the nerviest business proposition ever issued in Missouri. The letter follows:

"Dear Sir: Your letter of Dec. 26 came to-day and noted. I was much pleased with your suggestion about borrowing money from the bank here. In fact, I was so pleased that this morning I went to the bank and asked for a loan. I was told that it would be necessary to get another signature on the note besides my own. Now, I do not care to ask anyone down here to endorse for me, but as you and I have had considerable business together I enclose the note for your signature. Please sign just below where I have written my name.

"You will probably notice that the note is for $300 instead of $200, the amount of your bill. You see, I owe two other fellows who handle the same kind of goods as you $50 each and I thought as long as you and I are going to pay your bill we might as well borrow enough to pay the other fellows at the same time."
—Kansas City Star.

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRICK PLATES.

		Per Box
IC	14x14	$10 50
IC	14x20	7 15
IX	14x20	8 40
IXX	14x20	9 60
IXXX	14x20	11 85
IXXXX	14x20	13 10
IC	20x28	14 50
IX	20x28	16 50
IXX	20x28	18 95
IXXX	20x28	21 35
IXXXX	20x28	23 75

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$9 00
Cokes, 200 lbs	IC	20x28	9 35
Cokes, 216 lbs	IC	20x28	75
Cokes 216 lbs	IX	20x28	11 70

PIG IRON.

Lake Sup. Charcoal	$20 50@$21 00
North'n Coke Fdy., No. 1	19 75@ 20 00
North'n Coke Fdy., No. 2	19 25@ 19 50
North'n Coke Fdy., No. 3	18 75@ 19 00
Northern Scotch, No. 1.	20 00@ 20 50
Ohio Strong Softeners, No. 1	20 30@ 20 80
Ohio Strong Softeners, No. 2	19 80@ 20 30
Southern Silvery, 4 to 6 per cent Silicon	19 15@ 19 40
Southern Coke, No. 1	18 40@ 18 65
Southern Coke, No. 2	17 90@ 18 15
Southern Coke, No. 3	17 40@ 17 90
Southern Coke, No. 4	17 15@ 17 40
Southern Coke, No. 1, Soft	18 40@ 65 18
Southern Coke, o. Soft	17 90@ 18 15
Southern Gray Forge	16 40@ 16 65
Southern Mottled and White	16 15@ 16 40
Malleable Bessemer	20 00
Jackson Co. & Ky. Silvery 8% Silicon	22 30
Jackson Co. & Ky. Silvery 10% Silicon	23 30@ 24 30
Alabama Basic	18 65@ 18 90

BLACK SHEET STEEL.

No. 16	per 100 lbs.	$2 55
No. 18-20	per 100 lbs.	2 60
No. 23-24	per 100 lbs.	2 65
No. 25-26	per 100 lbs.	2 70
No. 27	per 100 lbs.	2 75
No. 28	per 100 lbs.	2 85
No. 29	per 100 lbs.	3 05

POLISHED SHEET STEEL.

No. 24	per 100 lbs.	$4 60
No. 26	per 100 lbs.	4 70
No. 27	per 100 lbs.	4 80
No. 28	per 100 lbs.	4 90

SMOOTH STEEL.

Wood's Smooth,	No. 20	$2 90
" "	No. 22-24	2 95
" "	No. 25-26	3 00
" "	No. 27	3 05
" "	No. 28	3 15

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel. "A" $10 20, "B" $9 20

Dickey Planished Sheet Steel....8½c

GALVANIZED IRON.

Regular Sizes.

No. 16, per 100 lbs.	$3 20
Nos. 18 & 20, per 100 lbs.	3 35
Nos. 23 & 24, per 100 lbs.	3 50
No. 26, per 100 lbs.	3 70
No. 27, per 100 lbs.	3 90
No. 28, per 100 lbs.	4 10
No. 30, per 100 lbs.	5 00
Nos. 22 & 24 x 36 in., per 100 lbs.	3 70
No. 26 x 36 in., per 100 lbs.	3 90
No. 27 x 36 in., per 100 lbs.	4 10
No. 28 x 36 in., per 100 lbs.	4 30

SOLDER.

XXX Guaranteed ½ & ½	per lb. 20¼c
Commercial ½ & ½	per lb. 19c
No. 1 Plumbers	17¾c

SHEET ZINC.

600 lb. Casks	case, per cwt. 0 90
300 lb. Casks	per cwt. 7 95
heets	per cwt. 7 70

COPPER.

Copper ..... base, 21c

TIN PIGS AND BARS.

Banca, pigs, per lb.	35@35½c
Straits, pigs, per lb.	35c
Straits in bars, per lb	37c

LEAD.

American Pig	$4 60@$4 62½
Bar	6½c
National (White) brands (in less than 100 lb. lots), per lb.	7½c

Sheet.

Full coils	per 100 lbs. $7 00
Cut coils	per 100 lbs. 7 25

HARDWARE.

ADZES.

Carpenters'.

Triumph	40&10%
Cutmore	50&5%

Coopers'.

Barton's	20%
White's	15%

Railroad.

Triumph	40&5%
Cutmore	50%

Ship.

Triumph	33⅓&5%
Cutmore	40%
White's	12½%

AMMUNITION.

Caps, Percussion—per 1,000.

F. L. Waterproof, 1-10s.	40c
G. D.	35c
Musket	60c

Cartridges.

Winchester Rim Fire Ctgs.	50&3%
Winchester Cent Fire, Pistol and Rifle	25&3%
Winchester Cent Fire, Military and Sporting Ctgs.	15&8%
Winchester Blank Ctgs. 22 cal.	$1 25
Winchester Blank Ctgs. 32 cal., C. F.	4 60
Winchester BB Caps, Rnd. ball	1 50
Winchester BB Caps, Conical ball	1 95
Winchester Cent. Fire, Military and Sporting Ctgs	15&8%

Primers.

Berdan Primers	$1 00
Winchester Primers	30%

Shells.

New Rival Empty Paper Shells, 10 and 12 gauge	25%
New Rival Empty Paper Shells, 16 gauge	20%
Repeater Empty	20%
Leader Smokeless	25%
Winchester Repeater Loaded Shells	40&5%
Winchester Leader	40-10&10%
New Rival Loaded Shells	33⅓ & 11%

Gun Wads—per 1,000.

Winchester Gun Wads	15%

Powder.

		Each
DuPont's Sporting, kegs		$ 4 50
" "	½ kegs	2 50
" "	¼ kegs	1 40
Dupont's Sm'k'less	50-lb. drum	22 45
" "	25-lb. kegs.	11 35
" "	12½-lb. kegs	5 80
" "	6¼-lb. kegs.	2 97
" "	1-lb. cans	51

Shot.

Drop shot, sizes smaller than B, 25-lb. bags, per bag	1 70
Drop shot, B and larger sizes, 25-lb. bags, per bag	1 95
Buck Shot, 25-lb. bags, per bag	1 95
Chilled Shot, 25-lb. bags, "	1 95

ANCHORS.

Expansion Screw Anchors 10%

ANVILS.

Trenton, 70 to 80 lbs.	9½c per lb
Trenton, 81 to 150 lbs.	9½c per lb

ASBESTOS.

Board and Paper 33⅓%

AUGERS.

Boring Machine	70%
Irwin's	40&10%
Carpenters' Nut	70%

Hollow.

Bonney's—list $30.00	75&5%
Stearn's, No. 3 "	36 00

Post Hole.

Digwell, 8-inch per doz.	12 50
Iwan's Post Hole and Well	40&5%
Vaughan's, 4 to 9-in., per doz.	6 25

Rafting.

Snell's	50&5%

Ship.

Ford's, with or without screw	40-5%
Snell's, " " "	40-5%

AWLS.

Brad.

No. 3 Handled per doz.	$0 40
No. 1050 Handled "	80
Shouldered, assorted, 1 to 4, per gro.	1 20
Patent asst'd, 1 to 4 "	1 20

Harness.

Common "	1 20
Patent "	90

Peg.

Shouldered per gro,	$1 20
Patent "	60

Scratch.

No. 1, handled "	4 80
No. 15, socket handled. per doz.	1 25
No. 7 Stanley "	1 80

Sewing.

Common per gro.	90
Patent "	90

AXES.

Boy's Handled.

Lippincott, 3 lb per doz.	$6 50
Cutmore "	6 75

Broad.

Triumph, West, Pat	40-10&5%
Triumph, Can. Pat	50&10%
Firemen's (handled) per doz	$13 00
Miners' (handled) "	6 50

Single Bitted (handled).

Silver Eagle, 3 to 4 lbs., pr dz.	$10 50
Cutmore " " "	8 75
Keystone " " "	9 25
Forest Clipper " " "	8 50
Premier " " "	6 75
Crescent " " "	5 75

Single Bitted (without handles).

Cutmore, per doz. 3 to 4 lbs.	$6 75
Forest Clipper, " "	6 50
Keystone, " "	7 25
Perfect " "	6 75
Premier " "	5 00
Silver Eagle " "	8 25

Double Bitted (without handles).

Cutmore, 3 to 4 lbs. per doz.	$8 75
Silver Eagle, " "	10 25
Keystone " "	9 50

The above prices on axes of 3 to 4 lbs. are the base prices.

3½ to 4½ lbs. advance 25c.
4 to 5 lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$3.00	4.50	5.50	6.00

BALANCES, SPRING.

Frary's	50%
Pelouze	30%

BARS, CROW.

Pinch or Wedge Point ..... cwt. $3 25

BASKETS.

Clothes.

Small Willow	per doz.	$5 75
Medium "	"	6 50
Large "	"	7 25

Galvanized Iron.

	½ bu.	1 bu.	1½ bu
Per doz.	$4 00	5 50	7 00

BEATERS.

Carpet. Per doz.

No. 11 Coppered Spring Wire	$1 00
No. 12 Tinned Spring Wire	80
No. 10 Woven Wire	1 10

Egg. Per doz.

No. 50 Imp. Dover	$0 75
No. 102 " " tinned	85
No. 150 " " hotel	1 50
No. 10 Heavy hotel tinned	2 10
No. 13 " " "	3 30
No. 15 " " "	3 60
No. 18 " " "	4 50

BELLOWS.

Blacksmiths'	65%

Hand.

8 inch per doz.	$8 00
10 inch "	10 00

Moulders'.

12 inch "	13 00

BELLS.

Call.

3 in. Nickeled Rotary Bell, bronzed base per doz.	$5 00

Cow.

High Grade	60&10%
Kentucky	70%

Door. Per doz.

New Departure Automatic Rotary.	$6 00
3 in. Old Copper Bell	4 00
3 in. Old Copper Bell, fancy	6 00
3 in. Nickeled Steel Bell	4 50
3½ in. Nickeled Steel Bell.	5 00

Hand.

Hand Bells, polished	50@50&5%
White Metal	50%
Nickel Plated	40%
Swiss	60&5%
Silver Chime	33⅓%

Miscellaneous.

Church and School, steel alloy	50&10%
Farm, lbs. 40 50 75 100 Each	$1.10 1.40 2.00 2.75

BEVELS, TEE.

Stanley's, rosewood handle, new list	40&5%
Stanley's iron handle	40%

BINDING, OILCLOTH.

Zinc	75&10%
Brass	70%
Brass Plated	75&10%

BITS.

Auger.

Extra Double Spur	70&10%
Snell's Car and Machine	50&10%
Triumph	50&5%
Snell's Ship	40&5%
Irwin	50&5%
Russell Jenning's	25&10%
Clark's Expansive	60%
Steer's " Small list, $22.00	30%
" " Large " $26.00	30%
Irwin Car	45%
Snell's Ship Auger pattern Car	40&5%

Center ..... 40&10%

Countersink.

No. 18 Wheeler's	per doz.	$1 25
No. 20 "	"	1 75
American Snail head.	"	75
" Rose "	"	90
" Flat	"	75
Mayhew's Flat	"	1 25
" Snail	"	1 25

Dowel.

New Jennings	40&10%

Gimlet.

Standard Double Cut		60%
German Pattern	per doz.	$0 60
German	"	65
Gouge	"	80
Spoon	"	80
Countersink	"	1 00

Reamer.

Jenning's Square	"	2 50
Standard Square	"	75
German Octagon	"	75

Screw Driver.

No. 7 Common	"	50
No. 1 Triumph	"	1 25
No. 2 "	"	1 50
No. 340 Shepardson's	"	1 25
No. 1 Smith's	"	1 25

BLACKING, STOVE. (See Polish)

BLADES, SAW.

Butchers'.
Standard ⅞ & 1¼ in.....40%
Clock Spring.....40%
Star.....15%
Coil.....each $1 50

Hack.
Disston's.....25&5%
Flexible.....33⅓&5%
Cutmore.....33⅓%

Wood.
Jackson's.....per doz. $2 25
Disston's—No. 6, 16, 26 & 045.. 4 25
Triumph..... 3 50
Forest Clipper..... 3 00

BLOCKS.

Snatch.
Wooden.....55&10%
Steel.....40&10%

Tackle.
Iron Strapped.....70&10%
Hartz Steel.....40&10%

BOARDS.

Stove.....40%

Wash.
Globe, single.....per doz. $2 25
" double..... " 2 75
Magnolia..... " 2 65
Crystal Glass..... " 3 40
Brass King..... " 3 40
Nickel Plate..... " 3 40
Enamel King..... " 3 40

BOBS, PLUMB.

Carpenters'.
No. 2, iron.....per doz. $0 65
No. 00, " ..... " 1 30
No. 0, " ..... " 1 80
No. 3, lead..... " 2 00
No. 4, " ..... " 3 40
No. 113, brass plated. " 1 10
No. N30, nickel plat'd " 1 30
No. N31, " " " 1 85

BOLTS.

Carriage, Machine, Etc.
Carriage ⅜x6 and sizes smaller and shorter.....75&5%
Carriage, sizes larger and longer than ⅜x6.....65&10&5%
Machine, ⅜x4 and sizes smaller and shorter.....75&5%
Machine, sizes larger and longer than ⅜x12.....65&10&5%
Machine, longer and larger than ⅜x12.....65&10%
Elevator.....50-10&5%
Plow.....60&10%
Stove.....80&10%
Tire.....75&10%
Wagon Box Strap.....70&10%

Mortise Door.
Gem, iron.....60%
" bronze plated.....20%

Barrel.
Cast.....60%
Wrought.....75%
" Bronzed.....50%

Flush.
Wrought.....50&10%

Spring.
Wrought.....70%
" Heavy.....70%

Square.
Cast.....50&10%
Wrought.....75%

BORERS.

Angular.
Miller's Falls.....per doz. $13 75

Bung.
Enterprise Mfg. Co.'s No. 1.....Each. $1 10
" " " No. 2..... 1 40

BOXES.

Mail, No....	1	2	10
Per doz.....	$3.25	4.25	17.50

Miter.
New Langdon.....15&5%
Stanley's.....30%
Seavey's.....each $1 25

BRACES.

Barber's.....50&10&10@50&10&15%
Fray's Genuine Spofford's.....60%
" Nos. 66 to 146.....50%
" No. 0108.....$3 50
" No. 0110..... 3 75
" No. 08..... 2 75
" No. 010..... 2 85

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1 per doz. $9 60
" No. 2 " 10 20

Shelf.
Cast Iron, Bronzed..... 50, 10, 5%
Griffin Wrought Steel..... 75&10%
" Folding..... 70&10%

BROILERS.

Wire.....70&10%
Crown, Self Basting, No 80. doz. $2 50

BUCKETS.

Pump Rubber.
Wychoff.....per gr. $4 75
Cooper..... " 4 75
Champion..... " 7 50
Victor..... " 9 25
Star..... " 5 00
IXL..... " 6 75

Well.

Galv'd Qts.....	10	12	14
Per doz.....	$2.90	$3.25	$3.40

Wooden, top ear, plain, per doz 3 75
" " swivel " 4 85

BUCKS, SAW.

Folding.....per doz. $2 10

BURRS, RIVETING.

Copper Burrs only.....35-10&5%
Tinners' Iron Burrs only.....70%

BUTTS.

Cast Iron.....65-10&5%
Wrought Brass.....15%
Wrought Steel Bright.
Griffin.....75&10%
" Ba l Tip.....75-10-10&10%
" " Bronzed.....70%
Wrought Steel, Japanned.
Nos. 731 and 733.....70-10-10&10%

CALIPERS.

Double.....78%
Inside and Outside.....70&10%
Wing.....70%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M.....$3 75

Toe.
Shoenberger.....per ℔ 5 c
Bessemer..... " 4½c
American..... " 7 c
Swedes..... " 8½c

CANS.

Cheese Factory.
Ontario Pattern.

Gallons.....	20	30	40
Each.....	$3.85	$4.50	$5.65

Milk.
Holstein.

Nos.....	300	301	302
Gals.....	5	8	10
Per doz.....	$20.00	$21.00	$23.00

Chicago Pattern.

Nos.....	105	108	110
Per doz....	$15.00	$16.50	$18.50

Iowa Pattern.

Nos.....	408	410
Per doz.....	$19.00	$20.50

New Elgin Pattern.

Nos.....	705	708	710
Per doz.....	$19.00	$20.50	$22.00

Burn Pattern.

Nos.....	700	701
Gals.....	8	10
Price.....	$1.75	$2.00

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS.

Hay.
Diamond, Regular.....each $3 50
Diamond, Sling..... " 6 50
Myers' Imperial..... " 3 50
" Clover Leaf..... " 3 65

CARTRIDGES.

See Ammunition.

CASTERS.

Standard—Ball Bearing.....50&10%
Bed.....60&5%
Common Plate.
Brass Wheel.....60&10%
Iron and porcelain wheels, new list.....60&5%
Philadelphia Plate, new list.. .. 70%
Martin's.....60%
Payson's.....75&10%

CATCHERS, GRASS.

Carroll's No. C..... ...per doz. $4.25
Wildermuth's

Nos.....	1	2	3
Per doz.....	$5.00	$5.75	$6.25
Nos.....	4	5	6
Per doz.....	$6.75	$9.50	$10.00

CHAIN AND CHAINS.

Breast Chains.
Doubleslack .....doz. pairs $5 75
With Covert snaps. " 5 00
With slide..... " 3 25
Without slide..... " 2 85

Bright Ox Chains.
$\frac{5}{16}$ in. $7.25; ⅜ in. $5.45 per 100 lbs

Cable Coil Chain.

Inch.....	$\frac{5}{16}$	⅜	$\frac{7}{16}$	½
Per 100	$3.80	$7.00	$6.00	$5.20

Inch.....	$\frac{7}{16}$	½	⅝	¾
Per 100 lbs..	$5.00	$4.90	$4.75	$4.65

Inch.....	⅞	1	1⅛
Per 100 lbs..	$4.55	$4.55	$4.65

Cable Log Chain.
Advance 25c per 100 lb. on Cable Coil

Cow Tie Chains.
American 2 toggle.....50&5%
" toggle and snap ..50&5%
" open & closed ring, 50&5%

Halter Chains.
American, new list.....33⅓&5%
German.....60&10%
Niagara, new list.....40&5
Brown's, " .....40&5%

Picture Chains.
Light B ass, 3 ft.....per doz. 50c
Heavy Brass, 3 ft..... " 75c

Pump Chain.
Galvanized, per 100 lbs.....$5.00

Safety Chain.
Brass.....60&10%

Special Steel Loading Chain.

Inch.....	½	$\frac{9}{16}$	$\frac{5}{16}$
Per 100 lbs...	$16.00	$13.50	$12.50

Stretcher Chains.
$\frac{5}{16}$ in. $8.50; ⅜ in. $7.75 per 100 lbs.

Tie-Out Chains.
Brown's.....70&10%

Trace Chains.
Western Standard.
6½—6-2.....per pair 30c
6½—8-2..... " 34c
6½—8-3..... " 33c
6½—10-2..... " 38c
7 —8-2..... " 38c
7 —10-2..... " 42c
7 —10-1..... " 48c
7 —10-0..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.

Wagon Stay Chains.

Inch.....	½	$\frac{9}{16}$	⅝
Per 100 lbs...	$6.50	$6.00	$5.50

CHALK, CARPENTERS'.

Blue.....per gross 58c
Red..... " 48c
White..... " 38c
Common White Sch'l Crayon..... " 5½c

CHARCOAL

In barrels.....per bu. 22c

CHECKS, DOOR.

Blount.....30%
Sargent's.....30%

CHIMNEY TOPS.

Iwan's Volcano.....50%

CHISELS.

Box,

Inches.....	10	12	14
Round, per doz.	$2.10	$2.25	$2.75
Flat "	2.85	3.60	4.20

Cold.
Good quality.....per ℔ 10@19c

Socket, Framing and Firmer.
Barton's.....20%
Peck, Stow & Wilcox Co.....70%
For beveled back, add per doz. .60c

Tanged, Firmer.
With handles.....30&5%

Choppers, See Cutters, Meat.

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers.....per doz. $6 25
Yankee, for Yankee Screw Drivers..... 5 00

CHURNS.

Anti-Bent Wood, Gal..	5	7	10
Each.....	$3.90	$4.15	$4.40

Belle, Barrel.....70%

Common Dash, Gal..	4	5	6
Per doz.....	$7.75	$8.50	$10.50

Hero.....70%

Union, Gal.....	5	7	10
Each.....	$3.65	$3.90	$4.75

CLAMPS.

Adjustable.
Martin's.....30%

Carpenters'
Steel Bar.....25%

Hose.
Sherman's, brass, ¾ in., per doz..33c
Double, brass, ¾ in., " 65c

Saw Filers.
Disston's list, $30.00.....30%
Stearn's, No. 0, $3.50; No. 1, $11.50; No. 3, $5.00 doz.
Wentworth's, No. 1 $6.00; No. 3 $7 50

CLAWS, TACK.

Cast, wood hdle.....per doz. 45@60c
Forged steel, wood hdle " $0.80
Solid Steel..... " 1.60
Giant..... " .60

CLEANERS.

Drain.
Iwan's Adjustable.....55%
Iwan's Stationary.....40&5%

Pot.
Wire.....per doz. $0.55

Side-walk.
Steel.....per doz. $3.25
XLCR.....65&5%

CLEAVERS.

Family.

Griffin, In.....	6	7	8
Per doz.....	$5.50	$5.75	$6.25

Royal.....per doz. 2 25

Butchers.
Beattys, Kitchen.....40%

CLEVISES.

Malleable..... .... per ℔ 4¼c

CLIPPERS.

Bolt.....$1.90@$4.75

CLIPS.

Axle.....65&5%

Damper.
Standard.....per doz. 65c
Troy..... " 38c

Hame..... " 17c

CLOTH.

Emery.
Triumph.....50&10%
B. & A.....50%

Hardware Wire—full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft..$1 85
9 to 12 " " " " 2 15
2 to 8 " galv. " " 3 00
7 and 8 " " " " 4 50

Screen Wire.
12 mesh, painted, per 100 sq. ft..$1 25
14 " " " " 1 85

COCKS AND FAUCETS.

Compression Plain Bibbs...60-10-2½%
Lever Bibb Cocks..... 60&10&5%
Compression Hose Bibbs.....60-10%
Telegraph Faucets (new list)...50-5%
Racking Cocks (new list).....60&20%
Compression Lock C'ks(n'w list)..70%
Andrew's Brass Faucets.....70%
Angle Plug Faucets, per doz....$0.85
Milk Can Faucets, per doz...$2.60-4.20
Petroleum Faucets (new list) 70&10%

COLLARS, STOVE PIPE.

Inches.....	5	6	7
Plain Tin....per gro.	$1.60	$2.00	$3.00
Japanned Tin "	3.00	3.00	4.25
Lacquered Brass "	2.40	2.60	3.60

COMBS, CURRY.

Nos....	000	11	15	39	89	108
Per doz.	$0.32	.55	1.85	.85	1.10	.75
Nos....	299	320	390	532	620	1400
Per doz.	$1.00	.80	1.30	1.15	.70	1.35

COMPASSES.

Carpen'ers'.....70%
Pencil—Faber's.....per doz. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 ℔.....per ℔ 32c
1½ ℔..... 29c 2 ℔.... " 28c
3 ℔ and larger..... " 26c

CORD.

Picture.
White Wire.....80-10&5%

Sash.
Baltic Braided Flax.....per ℔ 20c
Silver Lake, white 7-32 in. " 29c
" " " 8-32 in. " 23c
Keystone.....8-32 in. " 26c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular..... 50%
Williamson's Forged Worm.....50%

COTTERS, SPRING.

All sizes—new list.....90&10%

COUPLINGS, HOSE.

Brass.....per doz. $1.00
Brass Plated..... " .85

COVERS, WAGON—See Tents.

CRADLES, GRAIN.

Morgan's Grapevine...per doz. $22.75

CRAYONS—See Chalk.

CROW BARS.

Pinch or Wedge Point, per 100 lbs. $3.25

CUTTERS.

Glass.
Red Devil.....45¢
Smith & Hemenway Co.....50¢
Woodward.....40¢
Meat.
Enterprise Nos. 5, 10, 12, 22, 32 and 42.....25¢
No. 202, list, $1.50 ea.....40&7½¢
Universal... Nos. 1 2 3
Per doz.....$10.50 $12.50 $17.00
Pipe.
Stanwoods...No. 1 2 3
Each..... $0.85 $1.50 $4.00
Slaw and Crout.
3-knife Crout.....per doz. $9 75
1-knife Slaw..... " 1 65
2-knife " ..... " 2 25
Washer..... " 7 75

DAMPERS, STOVE PIPE.

Standard.....50&10¢
American.....45&10¢

DIES, STOCKS AND

Discount.....40&5¢
King's, Little Giant.....33⅓¢

DIGGERS.

Post Hole.
Acme.....per doz. $8 75
Atlas..... " 8 25
Eagle..... " 5 75
Eureka..... " 6 25
Hercules..... " 9 75
Iwan's Split Handle.. " 7 00
Iwan's Perfection..... " 7 75
Iwan's Hercules pattern " 9 00
Ryan's..... " 17 00
See also Augers—Post Hole.

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel painted, per doz. $7 93
1⅛ in. " " " 9 50
1⅛ in. 3-panel natural pine, fancy.....per doz. 12 40

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock.....60¢&65&5¢
Blacksmith's Twist.....60¢
Breast.
Common.....each, $2 25
Millers Falls..... " 2 10
Hand
Goodell's Automatic.
Nos.....01 03 3 20
Per doz..$7.75 $12.50 $14.25 $11 00
Goodell's Single Gear per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25
Reciprocating.
Goodell .....per doz. $16 50
Bit Stock.
Standard List... 60&5¢@60¢@10¢

DRIVERS, SCREW.

Hurwood ..... 40-10&10¢
Standard.....65&.0¢
Triumph.....70&5¢
Champion.....45¢
" Pattern .....60, 10&5¢
Clark's Interchangeable .....30¢
Edison .....60¢
Reed's Lightning ....45&5¢
Goodell's Spiral.....50, 10, 5&2½¢
Yankee Ratchet.....50¢
" " Spiral.....50&10¢
Smith & Hemenway Co.....40&5¢

EAVE TROUGH, GALVANIZED.

Territory. L. C. L.
Eastern .....80&2½¢
Central.. .....75&10&7½¢
Southern .....75&10
Western.....75&10
S. Western. .....75&2½
Terms, 2% for cash. Factory shipments generally delivered.

See also conductor pipe and elbows.

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches..... 5 6 7
Smooth, per doz. $0.70 $0.75 $1.10
Plain'd " 1.80 2.00 2.65
Corrugated Conductor.
Discount.....60&10¢
Corrugated Stove.
Inches..... 5 6 7
Smooth, per doz. $0.70 $0.80 $1.30
Pol'd " 1.30 1.40 2.10
Plain'd " 2.00 2.20 3.00
Four-Piece Stove.
Inches..... 5 6 7
Smooth, per doz. $0.40 $0.52 $0.80
Pol'd " .80 1.00 1.20
Plan'd " .20 1.40 2.40

EMERY CLOTH—See Cloth.

EMERY, TURKISH.

Size.....5-lb. pkgs. ½ kegs, kegs
No. 60 to 150, per lb. 6c 4c 4c
Flour..... " 5c 3c 3c

ENAMEL, IRON.

Nubian, ½-pt. cans.....per doz. 1 80
Peerless..... 1 50
Keystone..... 1 25

EXTRACTORS, PIG.

See Forceps, Pig.

EYES.

Bright Wire Screw—See Goods, B. W
Drifting Pick.....60, 10&5¢
Hooks and—
Brass .....55¢
Iron.....65&5¢

FASTENERS, STORM SASH

Schroeder's.....per doz. 85
Sensible..... " 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Nicholson's.....70&10¢
Disston's.....75&10¢
Challenge.....70&10¢
Royal.....80&10¢

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior.....per doz. $4 75
Whitson's Imp..... " 5 25

FORKS.

These goods are sold net this year.
Barley.
Steel, New List.....70&10&5
Wood, 4 tines, per doz.....$3.25
Coal, Coke, Cottonseed.....60¢
Hay.
Batcheller, 2 tine.....60&10¢
" 3 " .....70¢
" 4 " .....70&7½¢
Digging.....70&10¢
Scoop.....40¢
Header.
Batcheller, 3 tine.....66⅔&5¢
" 4 " .....65&10¢
Manure.
Batcheller, 4 tine..... 70&5¢
Ore.....40¢
Spading.
Batcheller.....80&10¢

FRAMES.

Hack Saw.
Union.....per doz. $5 75
Jenning's..... " 6 25
Cast ..... " 2 50

FREEZERS, ICE CREAM.

Arctic.
Qts..... 1 2 3 4 6
Each.....$1.10 1.30 1.50 1.80 2.30
Qts..... 8 10 12 15
Each.....$2.95 3.80 4.50 5.20
White Mountain.
20 qt., Ne. Platform...each $19 10
25 qt., " " " 22 60
25 qt., Simpson Power. " 43 50
40 qt., " " " 58 25

GAUGES.

Butt and Rabbet.
Stanley R. & L. Co.'s.....20&10¢
Cream Pail.
Fairmont.....per doz. $3 75
Marking, Mortise, etc.
.....50&10¢
Saw.
Atkin's, single, 55c; dbl. 80c per doz
Wire.
Disston's.....25¢

GIMLETS.

Discount.....35@40¢

GLASS, WINDOW.

First two brackets.....90&20¢
Above " " .....90&10¢

GLASSES, LEVEL.

Stanley R. & L. Co.....50&5¢

GLUE.

Bulk.
B Amber.....per lb. 11 c
A White ..... " 13½c
H. S. Amber ..... " 15½c
Liquid.
Army & Navy.....40¢
Le Page's—
List "A" .....37½¢
List "B" .....33⅓¢
List "C" .....25¢

GOODS.

Bright Wire.....90&10¢

GREASE, AXLE.

Wood Boxes.
Diamond .....per gro. $5 50
Frazer's..... 9 50
Hub Lightning 5 25
Paragon 6 75
Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each
Hub Lightning, 15 lb. 55c; 25 lb. 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross $9 50
3 lb. per gross.....25 00
5 lb. per gross.....37 00

GRIDDLES.

Soapstone.....40&10¢

GRINDSTONES.

Family.
Inches..... 7 8 9
Per doz.....$8.25 9.00 10.50
Loose.
Per ton.....$20 00@$21 00
Mounted.
Ball Bearing..... 1 2 3
Each $3.15 3.00 2.85
Common Bearing.. 1 2 3
Each $3.00 2.80 2.65

GUN WADS.
(See Ammunition.)

HAFTS, AWL.

Brad.
Common.....per doz. $0 19
Peg.
Common..... " 22
Patent, plain top .... " 47
" leather top... " 53
Sewing.
Common..... " 22
Patent..... " 52

HALTERS.

Jute Rope .....per doz. $0 85
Sisal Rope..... " 1 85
Web ..... " 1 75
Leather, rope tie..... " 6 50
" leather tie.... " 8 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Maydole's .....40&10¢
Engineers'.
Maydole's .....40&10¢
Farriers'.
Maydole's .....35&5¢
Machinists'.
Maydole's .....40&10¢
Nail.
Triumph.....40¢
Quaker City.....per doz. $3 00
Cast..... " 1 10
Maydole's .....30&5¢
Riveting.
Maydole's .....35&5¢
Shoe.
Cast.....per doz. 75c
Tack.
All Iron.....per doz. $0 35
Pol'd Iron, Hickory hdl. " 50
Mall. Iron, Inlaid..... " 1 55
Magnetic 1 2 3
Per doz 70c 80c $1.00
Magazine.....per doz. $4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs .....80¢
5 lbs. and over.....80&10¢
Masons'.
Single & Double Face .....75¢

HANDLES.

Auger.
Common Assorted ...per doz. $0 38
Peck's Adjustable ... " 2 10
Ives' " ....per set 1 35
Axe.....60¢
Chisel.
Hickory, Tanged Firmer, Assorted, 25c; Large, 27c per doz.
Hickory, Socket Firmer, Assorted 18c; Large, 23c per doz.
Applewood, Tanged Firmer, Assorted, 29c; large, 38c per doz.
Applewood Socket, Firmer, Assorted .....per doz. 24c
Coal Pick.....50&10¢
Drifting Pick.....50&10¢
File, assorted 13c, large 16c per doz.
Hammer.
Adze Eye.....per doz. 40c
Blacksmiths'.....per doz. 40c@70c
Machinists'..... " 45c@70c
Hatchet.....per doz. 40c
Hay and Manure Fork.....40&10¢
Hoe and Rake.....40&10¢
Saw.
Plain .....per doz. 75c
Varnished..... " 80c
Screw Driver.
Assorted ..... " 37c
Large ..... " 48c
Shovel and Spade.....40¢

HANGERS.

Barn Door.
Challenge.....60&10¢
Peerless.....70&10¢
Silver Star.....60&5¢
Storm King.....60@5¢
World's Best.....50¢
Wagner's Adjustable.....70&10¢
Warehouse .....60¢
Griffin.....70&10¢
Conductor Pipe.
Griffin..... .....70&10¢
Iwan's Perfection .....50¢
Eave Trough.
Baker's.....per gro. $2 35
Imperial .....20¢
Wire .....35¢
Parlor Door.
Acme .....per set $3 75
Ives' Improved ..... " 2 50
Lane's Standard..... " 3 50
" New Model..... " 3 10
Le Roy Noiseless..... " 4 00
Richards'.....40-10&5¢

HASPS.

Hinge, Wrought .....50&5¢
With Staples—See Staples.

HATCHETS.

Challenge.....40¢
Blood's.....50¢
Cast Claw.....per doz. $1 20@1 45
Cast Shingling.... " $0 95@1 20
Germantown.....40¢
Plumb's.....40¢
Underhill's Star Lath .....40&10¢

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wenzleman's No. 1....per doz. $ 9 60
No. 2.... " 10 20

HINGES.

Blind.
Clark's Gravity ...per doz. sets 80c
Parker's.....65¢
Shepherd's Noiseless, for Wood casing .....per doz. 1 05
Gate.
Clark's..... 1 2 3
Hgs & Ltch ....doz. $2.35 2.60 3.65
Hinges only.... " 1.70 1.90
Latches only... " .70 .75
Knuckle .....per doz. prs. $6 00
Leed's ..... " sets 6 75
Superior ..... " prs. 9 50
Spring.
American .....20¢
Bommer Bros Ball B'g Floor..35¢
Bommer Bros. Spring Hinges..40¢
Chicago.....25&5¢
Columbia Dbl Acting....40&10&5¢
Gem.....25¢
Ideal Detachable....per gro. $11.10
Matchless.....30¢
New Idea.....per gro. $8.40
Oxford.... .....20¢
Wrought Iron.
New Lists.....
Griffin.
Light Strap Hinges.....65&10&5¢
Heavy Strap Hinges.....75&10¢
Light T Hinges.....60&10&7½¢
Heavy T Hinges.....55&10¢
Extra Heavy T Hinges....70-10&5¢
Cor. Heavy Strap..... 75&10¢
Cor. Ex. Heavy T .....70&10&5¢
Screw Hook and Strap.
6 to 12 in.....per 100 lbs. $3 90
14 to 20 in..... " " 3 65
22 to 36 in..... " " 3 40
Screw Hook and Eye.
⅝ in.....per 100 lbs. $6 55
⅞ in..... " " 7 60
⅛ in..... " " 9 45

HOES.

Garden.....75&5¢
Grub.
Extra .....70¢
Hazel.....per doz. $5 00
Ladies' and Boys'.....75&10¢
Mortar .....80¢
Planter's Eye.....62½¢
Weed.....75&15¢

HOLLOW WARE—See Ware

HOOKS.

And Eyes.
Brass .....50&10&5¢
Iron .....65&10¢
Awning.....per gro. $1 80
Belt.
Brown's .....70&5¢
Jones' .....65&5¢
Bench.
See Stops, Bench.

Box.
Inch..... 6 8 10 12
Per doz.....$1.35 1.65 1.75 2.30
Hutmason & Beckley's, per doz. 2 50
(See Goods, Bright Wire.)
Bush.
Common Axe Handle, per doz. $7 00
Chain
Incl... ¼&5/16 ⅜ 7/16 ½
Per 100 $7.60-8.10 9.75 11.50 12 60
Clothes Line.
Japanned.....per doz. 22c@24c
Galvanized..... " 40c
Coat and Hat.
Cast Iron .....per gro. 72c@$1 50
Gem Wire.....70%
Conductor.
Malleable.....50&10%@50&10&5%
Wrought .....40&10%@50%
Corn.
Common, unpolished, per doz. $1 35
" polished.... " 1 80
"Cut Easy"..... " 2 75
Gate.
See Goods, Bright Wire.
Grass.
Common. Nos..... 2 3 1
Per doz $1.50 1.60 1.70
German.....per doz. 1 75
Little Giant..... " 3 00
Hammock.
With Plate.....per doz. 50c
With Screw..... " 45c
Lambrequin, or Drapery, per gro. 21c
Picture .....50%@50&10%
Potato and Manure.....70&12½%
Screw.
Brass.....80&20%
(See Goods, Bright Wire.)
Seat Spring.....per lb. 5½c

HOOPS, TUB.

Ever Ready .....per case $1 70

HOSE, GARDEN.

3 ply ¾ in. 35 lb. pressure per ft....4½c
3 " ¾ " 50 " " " 6½c
3 " ⅞ " 70 " " " 6½c
3 " ⅞ " 70 " " " ....8 c
4 " ⅞ " 80 " " " ....8 c
4 " ⅞ " 80 " " " ... 9½c
6 " ⅞ " 125 " " " ...10½c
8 " ⅞ " 150 " " " 12c
Cotton ¾ in. 75 lb. pressure per ft. 6c
" ¾ " 150 " " " 8c

HUSKERS.

Boss.
Nos..... B BB E 200
Per doz..... $2.00 2.00 1.75 .80
Nos..... L PP P K
Per gro..... $5.40 6.00 6.00 10.50
Nos..... 2000 3000 O
Per gro..... $3.50 9.00 24.50
Nos..... 60 50 64 68
Per doz.....$2.15 2.15 .85 1.45
Brinkerhoff's.
Per gro.....$14 40
Clark's
Nos..... 1 63 200 400
Per doz.... ... $0.40 .75 .75 1.75
Nos..... 200s 40s 3s 4s
Per doz..... $0.85 1.50 1.25 1.25
Nos.....A AB F
Per doz.....$3.00 $4.25 $2.50

IRON.

See Metals—First column.

IRONS.

Curling.
Common.....per doz. 33c@48c
Princess .....per doz. $0 65
Yale..... " 84
Oxford ..... " 1 15
Ruby ..... " 1 50
Tourist, Folding..... " 90
Pinking ..... " 70
Plane.
Wood Bench.....20&5%
Stanley R. & L. Co. (new list) ...25%
Sad.
Charcoal .....per doz. $11 00
Common, Polished, per 100 lb. 3 25
" Nickel plated, " 4 25
Chinese Polishing.....per doz. 7 40
Laundry, No. 1 ..... " 5 75
" No. 2 ..... " 6 25
Mrs. Pott's,
No. 50 J, Enterprise...per set 79c
No. 55 J, " ... " 76c
No. 50 T, " ... " 82c
No. 55 T, " ... " 79c
No. 50, Howells..... " 74c
No. 55, " ..... " 71c
Tailors' Sad.....per lb. 4½c
" Geese ..... " 4½c
Tuyere.
Single Duck Nest.....per doz. $5 25
Double " " ..... " 6 25
Sutton .....each 2 60

JACKS.

Locomotive.....75&5%
Wagon.
Oliver.
Nos..... 0 00
Each..... $0.60 $0.85
Standard.
Nos..... 1 2
Each..... $0.60 1.00
Wilcox.
Nos..... 1 2 3
Each.....$0.85 1.20 2.90

KETTLES.

Brass.....15%
Cauldron 45%
Copper.....per lb. 27c
Maslin 66⅔%
Sugar .....50&5%

KNIVES.

Beet Topping.
Clyde, 9-in. Scimiter Blade, dz. $3 85
California.....3 40
Cooper's Hoop.....15%
Corn.
Clipper.....per doz. $1 75
Disston's..... " 2 75
Earle's .... " 3 00
Woodford..... " 2 25
Drawing.
Standard 70%
Adjustable.....15%
Barton's Carpenters'.....10%
Folding Handle.....25&5%
Hay.
American, Sickle Edge..doz $10 50
Canton, Sickle Edge..... " 8 25
Heath's ..... " 8 00
Iwan's Sickle Edge..... " 9 50
Iwan's 1 npv'd Serrated.. " 10 00
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern..... " 6 00
Wadsworth's Sp'r Point " 8 50
Hedge.
Challenge ....per doz. $6 00
Disston's..... " 3 75
Mincing.
Common, Single ..... " 40
" Double ..... " 50
Streeter, 4 Blade..... " 1 30
" 6 Blade..... " 2 00
Putty.
Common..... " 60@1 00
Lander's..... per doz. $1 40@1 75
Scraping.
Beech Handle.....75@1 00
Lander's.....5 25@6 00

KNOBS.

Door.
Mineral .....per doz. $0 73
Porcelain ..... " 83
Jet..... " 83

LADDERS.

Common Long.
Per ft .....9c@14c
Extension.
Per ft 12c
Step.
Common, per ft.....6½c
" with Shelf, add 10c.
Keystone.....15c
Triumph, per ft 20c

LANTERNS.

Bull's Eye Police.
3-in. Flash Light.....per doz.$6 00
2¾-in. Regular..... " 4 00
3-in. Regular..... " 5 00
Tubular.
Prisco..... .....40&10&5%

LEADERS, CATTLE.

Nos 1 2 3
Per doz.....$0 55 $0 70 $2 75

LEATHER, LACE.

Cut.....40&10%
Sizes.
Ex. Quality.....per sq. ft. 24c

LEATHERS, PUMP.

Valve and Plunger 45%

LIFTERS.

Stove Cover.
Coppered.....per gro. 1 75@3 65
Ideal..... " 5 50
Alaska, Coppered " 4 00
" Nickeled " 5 00
Transom.
Payson's.....80%

LINES.

Chalk.
Twisted in 20-ft. hanks.
Nos..... 4 6 7 8 9
Per gross $1 50 2 00 2 25 2 50 3 00
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....25c 30c 35c 41c
Braided in 20-ft. hanks.
Nos..... 0 1 2 3
Per doz.....22c 25c 31c 35c
Masons', in 100 ft. hanks..doz... 80c
Clothes.
60-ft. Jute.....per doz. $0 80
72-ft. " ..... " 1 00
60-ft. Sisal ..... " 1 30
72-ft. " ..... " 2 00
50-ft. Cotton ..... " 1 00
50-ft. Braided Cotton " 1 10

LINING, STOVE.

In Bricks.....per crate 42c

MACHINES.

Boring.	Without Augers	With Augers
Angular.....per doz.	3 00	4 40
Upright.... "	2 60	4 00
Leather Riveting.		
Chicago, Pomeroy....per doz.		$9 00
Excelsior ..... "		2 00
Handy ..... "		2 00
Little Giant..... "		3 00
Pony, Pomeroy..... "		7 20
Washing.		
Boss	1 2 5	
Per doz.....$55.20 61.80 68.40		
Winner.....per doz.		54 00
Keystone ..... "		54 0
Round Wayne..... "		23 50
U. S. Steel..... "		60 00
Advance, f.o.b. Chic'go "		24 50

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.
Fibre Head, Small ...per doz. $5 00
" " Medium. " 5 75
" " Large... " 6 75
Round Hickory..... " 1 75
" Lignumvitæ .. " 2 85
Square Hickory..... " 1 75
" Lignumvitæ.. " 3 40
Tinners'.
Applewood ..... " 1 70
Hickory..... " 75@1 15
Hickory Sheet Iron.. " 1 30

MATS.

Door.
National Rigid.....50, 10&5%
Queen Flexible.....50%
Stove.
Standard Quality...per gross $2 90
Best " (Pure) " 4 00
Wire Covered Asbestos, Ex.
Heavy .....per doz. 1 00

MATTOCKS.

Warwood 70%
Extra 60%

MAULS.

Iron. lbs.	10	13	16	18	21
Per doz.	$3.00	3.60	4.50	5.00	5.75
Wood face, lbs.	10	12	14		
Per doz	$5.00	5.50	6.00		

Wood Choppers'.
Lake Super'r & Oregon Pat.. 80&5%

MEASURES.

	½ pk.	1 pk.	½ bu
Galvanized.per dz.	$2.00	$2.75	$3.60
Japanned... "	1.50	2.20	2.90

METAL.

Babbitt.
Alm .....per lb. 7½c
Best..... " 13 c
Common, No. 4..... " 6½c
Copper Mixed ..... " 19 c
Tony ..... " 9½c
See Metals—In first column.

MICA.

First Quality.....25%
Second Quality.....35%

MILLS, COFFEE.

Enterprise 25%
Parker.....50%
Arcade 50%

MITRE BOXES.

See boxes.

MOPS.

Erie.....per doz. $3 15
Handled Cotton.
Pounds..... ¾ 1 1¼ 2
Per dozen...$2.00 2.35 2.65 3.25

MOWERS, LAWN.

Ball-Bearing.
Inches..... 14 16 18 20
Each $6.25 6.75 7.25 8.00
Cheap Grades.
Inches..... 12 14 16 18
Each $2.25 2.25 2.35 2.50
Clipper .....50, 10&10%
Yale.
Inches..... 14 16 18 20
Each..... $3.50 3.75 4.00 4.25
Philadelphia.
All Styles Except A & E 60, 10&10%
Style A.....50&10%
Style E, High Wheel..60,10,10&10%
Drevels.....50%
All Day.....Net Price

NAILS.

Cut Steel.....rates, $2 10
Horse Shoe.
Ausable .....55&5%
Capewell 15%
Perfect .....55&5%
Putnam 20-5%
Star 30%
Picture.
Brass Heads .....40&10%
Judd's.....60&10%
Brads.....85&10%
Furniture .....60&10%
Wire.
Small Lots.....$2 10
Carload " 2 05
Cement Coated..... 1 95

NAIL PULLERS.

See Pullers.

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized before Weav'g.80&10&5%
" After Weaving...80&10%
Cut Pieces.....65&5%

NIPPERS.

End Cutting.
Stubb's Pattern. Ins. 5½ 6
Per dozen $4.00 $4.25
End and Diagonal Cutting.
Swedish Side.....75%
Utica Drop Forge & Tool Co...60%
Hoof.
Heller's .....40&10%
V. & B.....55-5%

NOZZLES.

Hose.
Genuine Gem.....per doz. $3 15
Magic..... " 3 15
Mystic..... " 2 85

NUTS, HOT PRESSED.

Square Blank.
In. ¼ 5/16 ⅜ 7/16 ½ ⅝ ¾
lb. 9c 7½c 6c 5½c 4½c 4½c 4½c
Square Tapped.
In. ¼ 5/16 ⅜ 7/16 ½ ⅝ ¾
lb. 12c 10c 7½c 6½c 6½c 5½c 5½c
For 5 lb. boxes add ½c per lb. to above prices.

OILERS.

Chase Pattern
Brass and Copper.....50%
Zinc 60%
Engineers'
Cannon.....55%
Tin.....per doz. $2.00@$2.25
Machine.
Common .....per doz. $0 50
Copper Plated Steel.. " 85
Malleable Iron.....60, 10&5%
Jappaned.....65@75c

OPENERS.

Box.
Inches..... 10 12 14
Flat...per doz $2.85 3.60 4.15
Round " 2.10 2.25 2.75
Can.
Delmonico.....per doz. $1 30
Never Slip..... " 0 65
Crate.
V. & B..... " 5 75

OUTFITS, COBBLING.

Home.....per doz. $11 50
Economy..... " 4 90
Fireside..... " 10 50

PADLOCKS.

Standard Wrought .....70, 10&5%
Champion 50%
Eureka.....40, 10&5%
Yale .....60&5%

PAILS.

Cream.
14-qt., without Ga....per doz. $2 50
20-qt., " " .... " 3 00
20-qt., with Gauge.... " 3 50
Sap.
10-qt., Galvanized.....per doz. 1 60
12-qt., " ..... " 1 85
Stock
Galvd. qts. 14 16 18 20
Per doz.....$3.50 3.75 4.50 5.00
Water.
Galvanized, qts 10 12 14
Per doz $1 50 1.70 1.95
Wood.
Cable, 2 Hoop..... .per doz. $1 70
" 3-Hoop..... " 1 90
Cedar, 3-Hoop..... " 2 85
Standard, 2-Hoop..... " 1 60
" 3-Hoop..... " 1 80

PANS.

Dripping.....60&5%
Fry.
Common.....75&10%
Acme .....70&10%
Roasting.
Paxton.
Nos..... 1 2 3 4
Per doz.. $4 75 $5.75 $6 50 $7.50
Neverburn.. 4.00 4.50 5.50 6.50
Savory No. 200 .....per doz 8.50

PAPER.

Building.
Plain .....per 100 lbs. $1 10
Tarred..... " 1 20
Tarred Felt..... " 1 65
No. 20, Red Rosin .....pr roll 40
No. 30, Red Rosin ..... " 55
Sand and Emery.
Challenge.....50&10%
B. & A.....50%
Wrapping
Drab Floer.....per lb. 3½c
Rag..... " 2½c

PARERS.

Apple.
Bay State.....per doz. $13 00
Turntable ..... " 6 00
White Mountain .... " 4 75
Reading..... " 6 50
Potato.
Goodsell's Saratoga 10½ in. doz. 6 50
" " 5 in.. " 5 50

PICKS.

Adze Eye Ore .....65&5%
Drifting and Poll Picks.....70%
Extra Railroad .....70&5%
Surface.....65&5%

PINCERS.

Carpenters', cast steel.
In..... 6 8 10 12
Per doz...$1 80 $2 40 $2 80 $3 50
Blacksmith's 45%
Heller's 40%

PINS.

Clothes.
Common.....per gro. $0 14
Hoyt's..... " 31
U. S..... " 70
Picket.
Fluted 15 in.....per doz. $0 70
" 21 in..... " 1 60
Spiral ..... " 1 90

PIPE.

Conductor.
Territory.
Eastern.....70&10%
Central.....70&2½%
Southern .....65&10%
Western.....65&10%
Southwestern.....60&12½%
Lead.
Full coils.....per ℔. 7½c
Cut " ..... " 7¾c
Stove.
Acme—In. 5 6 7
Smooth, per jt.. 8¾c 9¾c 10¾c
Planished " .. 32 c 33 c 43c
Peerless—Smooth. 7¾c 8 c 9¾c
Polished 14½c 15½c 18c
Plan'hed 28 c 31 c 35½c
Made-up—In. 5 6 7
Smooth 7½c 8c 9½c
7 to 6 in. Smooth Tapers, pr jt..13c
6 in. Smooth T's..... " ..27c
7 to 6 in. Planished Tapers.....45c
"Yale" Pipe—Stove—
Crated—Nested—Polished Steel.
5-in., 28 ga., Pat. Lck...jt, $0 10
6-in., 28 ga., Pat. Lck...jt. 10¾
7-in., 28 ga., Pat. Lck...jt. 14½
7 to 6. 28 ga., Pat. Lck...jt. 16
Duplex—Uniform Blue Steel—
5-in., 28 ga., Pat. Lck...jt. 08¾
6-in., 28 ga., Pat. Lck...jt. 09½
7-in., 28 ga., Pat. Lck...jt. 12
7 to 6. 28 ga., Pat. Lck...jt. 13½
Wrought Iron Gas Pipe
⅛@½-in., black.....discount, 60%
⅝@½-in. ..... " 60,10&5%
¾-in. to 6-in.. black... " 70%
7 " 12 " .. " 62½%
⅛@¾ galvanized " 42%
⅝@½ " " 50%
¾ " 6 " " 57½%
7 " 12 " " 45%

PLANES.

Sargent Iron Bench.....60&10%
Stanley Iron Bench.....25&10%

PLANTERS.

Corn.
Monitor.....per doz..$7 75
Triumph..... " .. 6 00
Segment..... " .. 9 00
Potato.
Acme.....per doz. $6 25
Challenge..... " ..11 00
Pingree..... " .. 2 25
Eureka ..... " . 6 25

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Button's—In. 4½ 6 8 10
Per doz.....$2.40 $2.80 $3.70 $4.60
Button's Pattern.
In. 4½ 6 8 10
Per doz.....$2.00 $2.40 $3.00 $4.0
Cutting.
Bernard's.....40%
Lodi.....60&10&5%
End and Diagonal Cutting.
Swedish Side 70%
Utica Drop Forge & Tool Co....50%
Fencing.
Farmers' Choice....per doz ..$8 00
Russell's..... " .. 8 25
Flat and Round Nose.
Bernard's.....40%
German 65%
Lodi.....55%
Paragon.....50&10%
Gas—In. 6 8 10 12
Per doz...$2.35 $3.00 $4.00 $5.00

Tinner's.
Hollow.... .....40%
Solid..... each..5½c

PLUMBS AND LEVELS.

Common.....75%@75&10%
Cook's.....40%
Davis' Iron.....25%
Davis' Inclinometer.....15%
Stanley's.
Nos. 00 0 2 3
Per doz..$4.50 $5.00 $7.35 $8.4
Nos. 30 25 50 35
Per doz.$12.00 $17.00 $17.00 $12.0

POINTS.

Drive Well Points.....75&10%

POKERS—STOVE.

Wr't Steel, str't or bent, pr doz.$0.55
Wr't Steel, wood hand'ls " " .80
Nickel pl'td, coil hdl's.. " " .65

POKES—ANIMAL.

Brown's, wr't steel,per doz.$5.00@6.00

POLISH.

Metal.
Pride of the Bar.....$1.60
Putz Cream.
Pts. 1-6 ¼ ½
Per doz.....$0.80 $1.10 $1.65
Pts. 1 2 4 8
Per doz $2 75 $4.50 $7.50 $12.50
White Silk half pints, per doz.$2.00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine
Pts. 1-6 ½ 1 2
Per doz.....$0.70 $1.35 $2.25 $3.00
George William Hoffman.
U. S. Metal Polish Paste, 3 oz. boxes, per doz., 50c; pr. gro..$4.55
½-lb. boxes, per doz..... 1.20
1-lb. boxes, per doz 2.25
U. S. Liquid, 8 oz. cans, per doz., $1 25; per gro.....12.00
Barkeepers' Friend Metal Polish, per doz., $1.75; per gro..18.00
Shoe.
M. D. C.....per doz. 36c@50c
F. C. O..... " 40c
T. M..... " 55c@$1.75
Imperial.....per gr.....$5.00
Stove.
Black Eagle, 1 ℔ cans. pr gr..$15.00
Black Silk—
5 ℔. pail.....$0 70
Paste, 5 oz. cans....per doz. 75
Paste, ½ lb. cans.... " 1 00
Liquid, ½ pint cans..per doz $1 00
Liquid, 6 oz. cans... " 75
Steel Range Gloss.... " 1 75
Blackene, 1 ℔ cans....pr gro. 13 00
Black Jack, ¾ ℔ cans.. " 9 25
Dixon's Carb. of Iron.. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1 qt. per dz, ..$1 00
Square, 1½ qt..... " 1 25
Square, 2 qt..... " 1 50
½ qt. Reversible..... " 1 60

POTS, FIRE.

Bernz.....each $3 85
Clayton & Lambert's, ea..$4 75@6 25
Gate City.....each 6 25
Gem.....ea..$6 75@8 50

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co....25%
Henis .....per doz. $2 00

PRIMERS.

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $6 50
Henry's Improved..... " 75&10%
Water's Improved..... " 80&5%

PULLERS.

Cork.
Daisy.....each $3 10
Phoenix..... " 1 40
Quick and Easy..... " 2 70
Nail.
Giant.....per doz..$10 50
Blackhawk..... " .. 6 50
Morrill's ..... " .. 10 50
Tack—Giant ..... " .. 40

PULLEYS.

Awning—Jap'd.....60%
Clothes Line.....50&10%
Hay Fork.
Iron Wheel, 5 in.....per doz. $1 75
Wood Wheel, 6 in.... " 1 75
Wood Wheel, 6 in., pass knot..... .... " 2 15
Hot House—Jap'd .....50&10%
Screw..... " 60%
Side ..... " .....50&10%
Sash.
Clark's .....per doz $0 36
Common Sense, 2 in .. " 22
" Pattern, 2 in.. " 20
Empire..... " 20
Ideal..... " 30
Steel..... " 25

PUMPS.

Pitcher Spout.
Nos. 1 2 3 4
Each .....$.90 1.00 1.10 1.40
Spray.
Blizzard.....per doz. $14 50
Cyclone, tin..... " 3 40
" copper ..... " 6 75
Daisy..... " 9 00
Little Giant.....each 2 25

PUNCHES.

Conductors'.
No. 22.....per doz. $2 25
Machine.....per ℔. 19
Saddlers'.
Common.....per doz. 60c@70c
Good..... " 72c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 ℔s. 2 35

RAIL.

Barn Door.
Crescent T..... 4½c
Double Flange..... . 2½c
Matchless, 1 in..... ..... 3c
Matchless, 1½ in 3½c
Storm King..... 4c
World's Best 7c
Sliding Door.
Painted steel.....per ft. 4½c
Bronzed wrought iron... " 8½c

RAKES.

Coal or Wood.....per doz. $5.20
Garden.
Steel.....75&10%
Steel, bow.....75&7½%
Malleable Iron, heavy.....70&10%
Hay.
Wood.....$1.50@$3 00
Lawn—Wood.
XXX.....per doz. 3 00
Automatic ..... " 6 00
Hustler ..... " 3 50
Jumbo, 36 teeth..... " 6 00

RASPS—See Files.

RAZORS.

Bo-ras-ic 50%
Red Devil.....50%
Tree Brand.....50%

REGISTERS.

List December 5, 1904.

Black and White Japanned. .70&10%
Nickel Plated.....70&10%
Electroplated, Brass, Bronze or Copper.....70&10%

RINGS

Bull.
Copper..... 2½ in 3 in.
Per doz..... $1.10 $1.35
Rea's Impro'd Self Piercing copper, pr d'z. 1.60
Steel per doz.. .85 .95
Nickel Plated 1.35 ...
and Ringers—Hog.
Blair's Rings .....per doz. $0 45
Blair's Ringers..... " 60
Brown's Rings..... " 50
Brown's Ringers..... " 80
Champion Ringers.. " 1 60
Hill's Ringers..... " 45
Hill's Ring, boxes..... " 40
Major Rings ..... " 60
Perfect Ringers..... " 80
Wolverine Rings..... " 1 30
Wolverine Ringers... " 60
Fruit Jar.
White.....per ℔ 30c
Key.
Split, round.....per doz. 17c
Split, square..... " 32c
Ball, Round..... " 32c

RIVETS.

and Burrs.
Copper Belt 40%
Coppered Iron 75%
Tinners' 70%
Hame .....per ℔. $0 10
Slotted Clinch.....per doz. 40c@45c
Tubular.
Nos. 1 and 2 assorted sizes, doz. 45c

RIVET SETS.

See Sets.

ROPE.

Cotton.
⅜, 5-16-in. Com. on reels..per ℔. 11½c
⅜, 5-16-in. Com. in coils .. " 12c
⅜, 5 16 Imperial in coils . " 21c
Sisal.
Rates.....10½c
Premier, rates .....per ℔. 8½c
Pure Manila.
Rates..... " 13½c
Premier, rates ..... " 12½c

RULES.

Boxwood.....70%
Ivory .....45&5%

SASH WEIGHTS.

See Weights.

SAWS.

Back.
Atkins'.....40%
Disston's .....30&5%
Jackson's.....30&5%
Butchers'.
Atkins' Nos. 1, 2, 3, 5, 7..... ..40%
Atkins' Nos. 77, 78.....60%
Atkins' No. 79.....50&5%
Disston's.....40&5%
Circular.
Atkins'.....50%
Disston's.....50%
Hiles'.....50&10%
Compass.
Atkins' Nos. 2 & 3 .....40%
Atkins' Nos. 4 & 5.....40&10%
Common.....per doz. $1.35@$1.00
Disston's.....25&7½%
Cross-Cut.
Atkins'.....35&40%
Disston's..... 40&10% &50%
Dehorning.
Atkins'.....per doz. $5 50
Disston's..... " 5 75
Hack.
Atkins'.....40%
Disston's.....25%
Keystone.....30%
Hand and Rip.
Atkins'.....40%
Brown's .....30&7½%
Disston's No. 7.....35&5%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120.....30&5%
Keystone.....35&5%
Enterprise, hand.....per doz.$5 00
Our Saw, hand..... " 4 00
Our Saw, rip..... " 4 50
Keyhole—Disston's.....30&5%
Atkins' No. 5.....40&10%
Atkins' No. 6.....40%
Kitchen.
Atkins' .....50&10%
Sterling.....25%
One Man 50%
Panel.
Atkins'.....40&10%
Brown's.....30&7½%
Disston's No. 7.....35&5%
Disston's No. D100.....30&5%
Pruning.
Atkins' Nos. 1, 2 & 3.....35%
Atkins' Nos. 5, 6 & 7.....40%
Brown's.....25&7½%
Disston's.....30&5%
Wood.
Atkins'.....40&10%
Common.....per doz. $4 50
Forest Clipper..... " 5 00
Happy Medium..... " 7 00
Perfection ..... " 8 00
Crescent..... " 5 00

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 25
" painted.... " 1 70

SCALES.

Counter.
Pelouze..... .....40&10%
Platform.
Osgood.....50%

SCOOPS.

Grain.
½ Bu. "Hercules,"..per doz. $13 75
1 " " " 15 00

SCRAPERS.

Box.
Stanley's Adjustable, per doz.$3 00
Triangular..... " 4 00
Cabinet.
Cast Steel..... " 60c@75c
Stanley's No. 80..... " $7 80
Road.
Cubic ft. 7 5 3
Without runners, ea.$4.00 3.75 3.50
With runners.... " 4.25 4.00 3.75

SCREWS.

Bench.
Iron, in,..... 1 1¼ 1½
$3.25 $3.75 $4.50
Wood, white maple..per doz. $3 50
Hand—Wood.....30%
Hand Rail.....80&10%
Jack .....70&10&10%
Lag or Coach—all sizes, gimlet pointed.....75&5%
Saw—Centennial.
Nos. 1 2 3 4 5 6
Per doz. 18c 20c 26c 30c 23c 25c
Wood.
F. H. Bright.....87½&10&10%
R. H. Blued.....85&10&5%
F. H. Jap'd.....82½&10%
F. H. Brass.....85&10&5%
R. H. Brass.....80&10&5%
R. H. Nickel Plated.....80%

SCYTHES.

Clipper, grain.....per doz. $9 50
Clipper, grass ..... " 7 75
Vulcan..... " 7 25
Honest Dutchman..... " 7 00
Challenge..... " 8 00

SHAVING SETS.
Smith & Hemenway.....60%

SIFTS.
Nail.
Round, common.....per doz. $0 33
Square, " ..... " 42
Octagon " ..... " 33
Square, Triumph.... " 90
Cup Point, knurled, pr. doz. 90c@$1.00
Rivet.
Farmers'.. .....per doz. $1 20
Tinners'.....50&10%
Saw.
Aiken's Pattern.....per doz. $3 50
Common Lever..... " 1 20
Disston's Monarch... " 6 50
" X Cut..... " 12 00
German ..... " 1 05
Morrill's Old Style... " 5 00
" Pattern.... " 3 75
Leach's..... " 4 80
Nash's Hand..... " 3 15
" X Cut..... " 4 20
Stillman's Lever..... " 1 30
" X Cut..... " 2 50

SHARPENERS, SKATE.
Diamond.....per doz. $1 60
Smith & Hemenway.....20%

SHAVES, SPOKE.
Iron.....per doz. $1.35@$2.75
Wood..... " 2.75@ 4.75
Bailey's.....50&5%
Goodell's.....15%
Stanley's Universal.....30&5%

SHEARS.
Pruning.
Buckeye, No. 1.....per doz. $5 75
" No. 2..... " 7 40
California Pat. 9 in.. " 3 20
" " 10 in.. " 4 00
Draw Cut, No. 3..... " 13 75
" " No. 4..... " 16 50
Henry's Pat. 0 01 14 012
Per doz.....$1.40 $2.10 $2.90 $2.80
Star.....per doz. $4.00
Sheep—No. BBA.
Inches..... 6 6½ 7
Reg. Grip..... $11.25 $11.50 $12.00
Nar. Grip, doz. 11.00 11.25 12.25
Tinners'—See Snips.

SHEAVES, SLIDING DOOR.
Common.
Inches..... 3 4 5
Per set..... $0.34 $0.42 $0.70
Hatfield's.
Per set..... .75 1.00 1.60

SHELLS—See Ammunition.

SHELLERS, CORN.
Union.....per doz. $6.75

SHIELDS.
Expansion Bolt Shields.....50&10%

SHOES.
Conductor .....60&10%

SHOE POLISH—See Polish.

SHOT—See Ammunition.

SHOVELS AND SPADES.
Coal.
No. 2 Woodford .....per doz. $5 50
No 182. ..... " 6.00
Ames' new list.....Discount 12½%
Per Doz.
Neverbreak, hollow bck, blk. $15 75
National.... " " " 14 75
Buckeye .... " " " 10 00
Mohawk.... " " " 9 00
Drain.
Iwan's Perfection.....50%
Railroad, Etc.
Black Diamond.....per doz $10 50
Crescent..... " 5 75
Keystone..... " 8 75
Star..... " 4 75
Vaterland..... " 9 50
Hollow Back..... " 4 75
Ames' new list.....Discount 12½%
Snow.
Per doz.....$1.65@$9.00
Alaska Steel.
D Handle.....per doz. $3 50
Long Handle..... " 3 00

SINKS.
Cast Iron.
Painted..... 60%
Enameled, White.....65%
Wrought Steel.
Painted, new list.....40-10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.
Champion.....33⅓%
German Pattern.....30&5%
Judd's Pattern.....50%

SNATHS.
Double Ring, Bush.....per doz. $5 50
Patent Loop " .... " 5 75
" " Grass..... " 5 25

SNIPS, TINNERS'.
Heinisch's.....40&5%
National.....40&10%

SOLDER—See Metals.

SPRINGS, DOOR.
Perfect.
Nos..... 1 2 3 4
Per doz.... 30c 35c 40c 45c
Reliance.
Per doz.....light $1.25; heavy $2.50
Star.
Per doz..... light 90c; heavy $1.35
Torrey's.....per doz. $1.35
Warner's No..... 11 13
Per doz..... 75c $1.35

SQUARES.
Steel and Iron.....70&10%
(Add for Bluing, $2.50 per doz., net)
Mitre.
Stanley's No. 12.....60%
Try.
Stanley's No. 20, new list...45&10%
" No. 12 and 14.....55%
Try and Bevel.
Stanley's .....55&5%
Try and Miter.
Fox's.....per doz. $5.75
Winterbottom s.....70%

SQUEEZERS, LEMON.
Common Wood.....per doz. $0 70
Porcelain Lined, Wood. " 1 25
Boss, malleable iron.... " 75
Iron Frame, p'rel'n bowl " 2 25
" glass bowl... " 2 50
Little Giant, tin'd iron. " 4 00
Drum, japanned..... " 3 60
Drum, nickel plated .... " 4 50

STAPLES.
Blind.
Barbed.....per ℔ 9½@9½c
Butter Tub..... " 8@8½
Fence—less than carload.
Polished.....per 100 ℔ $2 30
Galvanized..... " 2 60
Netting.
Galvanized..... ...per 100 ℔ 4 00
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples.....85&10%
Extra heavy..... .....85%

STEELYARD.
Discount 25%

STONES.
Axe.
Hindostan.....per ℔ 5½@7c
More Grit..... " 9½c
Washita ..... " 17 c
Emery.....60%@60&5%
Oil—Mounted.
Arkansas Hard.....per doz. $23 00
Arkansas Soft..... " 15 50
Hindostan .....per ℔ 6½@6½
Oil—Unmounted.
Arkansas Hard.....per ℔ $2 05
Arkansas Soft..... " 1 10
Lily White..... " 45
Queer Creek..... " 15
Ouachita..... " 38
Washita ..... " 26
Sythe.
Black Diamond.....per gro. $8 00
Crescent..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 50
La Moille ..... " 7 00
Quinnebog..... " 5 00
Red End..... " 3 75

STOPS, BENCH.
Hotchkiss'.....per doz. $3 50
Stearns'..... " 4 75

STOPPERS, FLUE.
Common.....per doz. $0 40
Crown ..... " 45
Gem, flat, painted..... " 85
Gem, cor'd, decorated.. " 70
Kirch's..... " 90
Perfect..... " 70@85
Skinner's Common Sense " 80

STOVE PIPE—See Pipe.

STOVE BOARDS—See Boards.

STOVE POLISH—See Polish.

STRAPS.
Scoop.....per doz. prs. $1 85
Skate..... " " 60@70c

STRETCHERS.
Carpet.
Bullard's.....per doz. $3 90
Excelsior..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50
Wire.
N. S. Elwood's..... " 6 00
O. S. Elwood's..... " 6 00
Little Giant..... " 5 75
Safety ..... " 10 00
Star Lever..... " 6 25
Star Tackle Block.... " 9 50
Warner's..... " 6 25

SWIVELS.
Malleable Iron.....per ℔ 6½c
Wrought Steel.....per gro. $4 50

TACKS.
American Cut.....90&5%
American Wire.....85&25&10%
Bill Posters Cut.....90&30%
Blued Carpet.....90&10%
Tinned Carpet.....90&10%
Gimp.....90&10%
Upholsters' Cut .....90&20%
Upholsters Wire.....90&10%
Double Pointed.....90&20%
Copper.....per ℔ 32c
Canvas Nails.....75&5%
Clout Nails .....75&5%
Hungarian Nails.....80&5%

TAPES, MEASURING.
Asses' Skin.....35%
Bend Leather.....15%
Patent Leather.....15%
Lufkin's Steel.....25%
Lufkin's Metallic.....25%

TEE BEVELS—See Bevels.

THERMOMETERS.
Tin Case.....per doz. 80c@$1 25
Wood Back..... " $2.00@12 00
Glass..... " 12 00

TIES.
Bale.
Single Loop.....80&10%
All other kinds.....70%
Cow—See "Chains."

TOOLS, SAW.
Atkins' Dexter.....per doz. $4 50
Atkins' Excelsior..... " 6 50
Disston's Universal.....40%
Minature.
Smith & Hemenway.....25%

TRAPS.
Fly.
Balloon.....per doz. $0 90
Harper's..... " 1 00
Game.
Newhouse.....40&10%
New Victor.....70%
Mole.
Reddick's.....per doz. $6 25
Mouse and Rat.
Wood Choker...per doz. holes $0 11
Tin Choker..... " " 10
Delusion.....per doz. 1 00
Marty Rat..... " 6 00
Marty Rat Imitation.. " 3 50
Marty Mouse..... " 3 00
Marty Mouse Imitation " 2 25

TROWELS.
Brick.
Standard.....40%
Brade's.....15&5%
Disston's.....30%
Rose's.....25%
Plasterers.
Standard.....40%
Disston's.....25%
W. & McP.....25%

TRUCKS.
Bag.....each $2 00
Handy..... " 1 70
Warehouse .....60&5%
No..... 1 2 3
Half Ironed.... $3.00 $3.85 $5.50
Full Ironed.... 3.45 4.50 6.45

TUBS, WASH.
Standard. Ex.
Nos..... 3 2 1 large
Per doz....$5.00 $6.00 $7.00 $ 9.50
Dowell.
Per doz.... 5.35 6.35 7.00 9.50
Cedar.
Per doz.... 6.10 7.10 7.90 10 80
Indurated.
Per doz.... 8.55 9.45 10.80 13.50
Galvanized.
No..... 1 2 3
Per doz.....$4.75 $5.25 $5.85

TWINE.
Per ℔
3-ply Cotton Wrapping.....19c
4 " " " 19c
4 " " Extra Wrapping.....22c
4 " " " Hvy. Wrapping..20c
4 " " Wrapping on tubes...22c
3 " " " cones...20c
4 " " " " " ...20c
India Hemp, ½-lb. balls.....17c
" " ¼-lb. " 16c
" " ½-lb. " .....doz. 63c
3-ply " ½-lb. " 11c
3-ply " ½-lb. " 10c
Jute Wrapping, ½-lb. balls.....11c
Jute Wool, 1-℔. balls.....6½c
Seine.
Nos..... 9 12 15+
Soft.....per ℔ 26½ 26 25
Med..... " 26½ 26 25
Hard..... " 27 26½ 26
Staging, ½-lb. ball, size 21.....26½c
" " " " 24.....26c
" " " " 27.....26c
Bagging " " 23c
3-ply "B" in hanks.....18c
4 " "B" " 18c
3 " "A" " 27c
3 " Silver Finish, in hanks....37c
Fodder or Lath.
130-strand 6½c
200 strand.....7½c

VISES.
Bonney's.....35%
Cheney's 20%
Parker's Oval Slide.....50, 10&2½%
Sargent's Oval Slide,
In. 2½ 3 3½ 4½
Ea. $1 00 $1 25 $1 65 $2 00
Parker's Parallel.....18&20%
Parker's Victor.....15%
Parker's Combination.....75%
Solid Box.....50%
Adam's Mechanics'.....each 2 50
Williamson Universal.....60%

WARE.
Stove Hollow Ware.
Plain or Unground 60%
Ground Ware.....50&10%
Enameled Ware.....50%
Country Hollow Ware, per 100 lbs. $2.75
White Enameled Ware.
Maslin Kettles.....60&10&10%
Covered Ware, Tinned and Turn'd. 40%
Enameled 50%
Glue Pots, Tinned.....30%
Enameled.....35%
Enameled.
Cherry Blossom and Chrysolite. 50%

WASH BOARDS—See Boards.

WASHERS.
Standard O. G. cast iron...per ℔. 2½c
Wrought iron in bulk per ℔.:
In. ½ ¾ ⅞ 1
7½c 5½c 4c 3½c 3½c 3½c 3½c
Wrought steel in 5 ℔. boxes, per ℔.
In. ½ ¾ ⅞ 1
8½c 6½c 5c 4½c 4½c 4½c 4½c

WASHING MACHINES—See Machines.

WEDGES.
Ax.....per doz....30c
Galling .....per ℔ 10½c
Saw ..... " 8½c

WEANERS.
Calf.
Fuller's, per doz.....$2 00 to $2 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz..... 3 00 to 3 75
Standard, per doz..... 3 00
Hoosier, per doz..... 3 50 to 4 00

WEIGHTS.
Hitching .....per ℔ 2½c
Sash—F.O.B. Chicago...pr ton $24 00

WHEEL BARROWS.
Common Railroad....per doz..$15 00
Heavy " .... " .. 20 00
Panama Steel Tray " .. 35 00
Klondike " " .. 23 50
No. C4 Tubular " " .. 45 00
No. C5 " " " .. 48 75

WHEELS.
Corundum .....70&10&5%
Emery .....75&5%
Well In. 8 10 12 14
Per doz.....$2.10 $2.50 $3.15 $5.00

WIRE.
Barbed Painted. Galv'd.
Carloads..per 100 lbs..$2.20 $2.50
Less than car " .. 2.25 2.55
Brass.
In coils.....20%
In 1 ℔ spools, new list.....50&10%
Broom—Tinned.....60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils.....20&10%33⅓%
In 1 ℔ spools, new list .... 50&10%
Fence—Smooth.
Nos. 6 to 9, Annea'l'd, pr 100 lbs. $2.10
Nos. 6 to 9, Galvi'd... " 2 40
Hair—New list.....50&10%
Market.
Bright, full bdles.....70&10%
Bright, broken bdles.....70%
Coppered, full bdles.....70%
Coppered, broken bdles.....65&10%
Tinned, full bdles.....70&5%
Tinned, broken bdles.....65&10%
Picture—In coils.....80%@80&10%
In 5 ℔. spools, ...per ℔...26c
Plain—Small lots..... $2.10
Car lots 2.05
Small spools 5c per hundred higher.

WRENCHES.
Acme Standard.....60%
Alligator .....75&80%
Always Ready..... .....50&10%
Bemis & Call No. 2 Improved Pipe Wrenches 80%
Coe's Standard.....40&10%
Agricultural.....75&10%
Ellis Adjustable.....25%
Malleable "S".....per ℔...05½c
Malleable..... " 05½c
Stillson Pipe.....70&5%
Trimo " .....70&5%

WRINGERS.
Clothes.
No. 22, Guarantee....per doz. $32 00
No. 110, Guarantee.... " 32 00
No. 110, Brighton..... " 22 00
No. 110, Bicycle ..... " 31 00
No. 500, Royal ..... " 32 00
No. 350, Universal.... " 27 00
No. 300, Novelty..... " 27 00
No. 310, Keystone .. " 27 00
No. 100, Rival ..... " 22 00
No. 330, Relief..... " 27 00
No. 200, Superior..... " 24 00
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No. 15, Star..... " 16 00

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Revolving Bin Co., Chicago, Ill

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Friedley & Voshardt, Chicago, Ill
Garry Iron & Steel Co., Cleveland, O
La Crosse Steel Roof. Co., La Crosse, Wis
Schoedinger, F. O., Columbus, Ohio
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Copper

Hungerford, U. T., Brass & Copper Co., New York, N. Y

Corn Cribs

Denning Wire & Fence Co., Cedar Rapids, Ia

Cornices

Berger Mfg. Co., Canton, O
Canton Mfg. Co., Canton, O
Eller, J. H. & Co., Canton, O
Schoedinger, F. O., Columbus, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Cornice Brakes

Bertsch & Co., Cambridge City, Ind
Dreis & Krump, Chicago, Ill
Niagara Machine & Tool Wks., Buffalo, N.Y

Cream Separators

Sturges & Burn Mfg. Co., Chicago

Cut Offs—Rain Water

Cooney & Geiger, Indianapolis, Ind
La Crosse Steel Roof. Co., La Crosse, Wis
Howard, F. F., Marlette, Mich
Ulery, U. J., New York, N. Y

Dampers

Arcade Mfg. Co., Freeport, Ill
Howes Co., S. M., Boston, Mass
Sayre Stamping Co., Sayre, Pa
Wheeling Corrugating Co., Wheeling, W. Va

Dies

Globe Mch. & Stamp Co., Cleveland, O

Doors—Screen

Arcade Mfg. Co. Freeport, Ill.

Drain Cleaners

Iwan Bros., Streator, Ill

Duplicators

Daus, F. C. L., Duplicator Co., New York, N.Y

Eaves Trough

Canton Mfg. Co., Canton, O
Eller, J. H. & Co., Canton, O
Garry Iron & Steel Co., Cleveland, O
La Crosse Steel Roof. Co., La Crosse, Wis
Schoedinger, F. O., Columbus, O
Whitacre Mfg. Co., J. E., Rockford, Ill

Elbows—Conductor Pipe

Dieckmann, F., Cincinnati,
Wheeling Corrugating Co., Wheeling, W. Va

Elevators

Kimball Bros. Co., Council Bluffs, Ia

Enameled Ware

Briscoe Mfg. Co., Detroit
Lalance & Grosjean Mfg. Co., Chicago, Ill
Reed Mfg. Co., Newark, N. Y
Roseland Can & Spec. Co., Rockford, I
Star Enameling and Stamping Co., Pittsburgh, Pa

Enameling and Stamping Plants

Volkammer & Co., Pittsburg

Engineers & Contractors

Volkammer & Co., Pittsburg

Fencing

Cyclone Woven Wire Fencing Co. Waukegan, I
Denning Wire & Fence Co., Cedar Rapids, Ia
Pittsburgh Steel Co., Pittsburgh, Pa
Stewart Iron Works Co., Cincinnati, O

Files

Barnett, G. & H. Co., Philadelphia, Pa
Disston Henry & Sons, Philadelphia, Pa

Flue Stoppers

Stuber & Kuck, Peoria, Ill

Forks

American Fork & Hoe Co., Cleveland, O

Forming Rolls

Bertsch & Co., Cambridge City, Ind
Globe Mch. & Stamp. Co., Cleveland, O
Niagara Mch. & Tool Wks., Buffalo, N.Y

Foundry Supplies

Obermayer, S. Co., Cincinnati, O

Freezers—Ice Cream

North Bros. Mfg. Co., Philadelphia, Pa

Furnaces—Hot Air

Beckwith, Estate, P. D. Dowagiac, Mich
Bonnot Co., Canton, O
Craig-Reynolds Fdy. Co., Dayton, O
Detroit Heating & Lighting Co., Detroit, Mich
Forest City Fdy & Mfg. Co., Cleveland, O
Green Fdy. & Furn. Wks., Des Moines, Ia
Haynes-Langenberg Mfg. Co., St. Louis
Henry & Scheible Co., Cleveland, O
Kelsey Heating Co., Syracuse, N. Y
Lennox Furnace Co., Marshalltown, Ia
Mannen & Esterly Co., Cleveland, O
March-Brownback Stove Co., Pottstown, Pa
Meyer Furnace Co., Peoria, Ill
Miller, Wm. Range & Furnace Co., Cincinnati, O
Monroe Fdy. & Furn. Co., Monroe, Mich
Mueller, L. J. Furn. Co., Milwaukee, Wis
Peck-Hammond Co., Cincinnati, Ohio
Pittsburgh Stove & Range Co., Pittsburgh, Pa
Robinson Furnace Co., Chicago
Schill Bros. Co., Crestline, O
Schwab & Sons Co., Milwaukee, Wis
Smith, Chas. Co., Chicago, Ill
Thatcher Furnace Co., New York, N.Y
Wellsburg Heating & Fdy. Co., Wellsburg, W. Va.
Western Stove Works Co., Peoria, Ill
Wise Furnace Co., Akron, O
Youngstown Furn. & Supply Co., Youngstown, O

Furnace Pipe and Fittings

Green Fdy. & Furn. Wks., Des Moines, Ia
Meyer Bros., Peoria, Ill
Michican Safety Furnace Pipe Co. Detroit, Mich
Mueller, L. J. Furn. Co., Milwaukee, Wis
Wellsburg Heating & Fdy. Co., Wellsburg, W. Va

Hand Screws

Grand Rapids Hand Screw Co., Grand Rapids, Mich

Hangers—Door

Safety Door Hanger Co., Ashland, O

Hangers—Trouser

Pullman Mfg. Co., Rochester, N.Y

Hardware
Lawson Mfg. Co., Chicago, Ill

Hardware Jobbers
Clark, Quien & Morse, Peoria
Lee-Glass-Andreesen Hdw. Co., Omaha
Paxton & Gallagher Co., Omaha
Wells & Nellegar Co., Chicago, Ill

Hardware Specialties
Bishop Hdw. Co., Dowagiac, Mich.
Kees Mfg. Co., Beatrice, Neb

Heaters—Steam and Hot Water
Craig-Reynolds Fdy. Co., Dayton, O
Haynes-Langenberg Mfg. Co., St. Louis
Monroe Fdy. & Furn. Co., Monroe, Mich
Mueller, L. J. Furn. Co., Milwaukee, Wis

Hinges
Arcade Mfg. Co., Freeport, Ill
Griffin Mfg. Co., Erie, Pa
Kees Mfg. Co., Beatrice, Neb

Hoes
American Fork & Hoe Co., Cleveland, O

Hollow Ware
Avery Stamping Co., Cleveland, O
Sperry, D. R. & Co., Batavia, Ill

Hot Water Attachments
Smith Co., Chas., Chicago, Ill

Ice Cream Freezers
North Bros. Mfg Co., Philadelphia, Pa

Japanned Ware
Lalance & Grosjean Mfg. Co., Chicago

Joints
Arcade Mfg. Co., Freeport, Ill

Kitchen Utensils
Avery Stamping Co., Cleveland, O

Lanterns
Berger Mfg. Co., Canton, O
Pritchard-Strong Co., Rochester, N. Y

Lawn Mowers
Clipper Lawn Mower, Dixon, Ill

Lawn Mower Grinders
Zacharias, C. R., Asbury Park, N. J
Root Bros., Plymouth, O

Levels
Baker-McMillen Co., Akron, O
Stanley Rule & Level Co., New Britain, Ct

Lighting Systems
Ideal Epworth Acetylene Co., Johnstown, Pa.
Windhorst & Co., St. Louis, Mo

Lightning Rods
Maher & Sons, Preston, Ia
Moore Bros. Lightning Rod Co., Graham, Mo
Security Lightning Rod Co., Burlington, Wis

Mail Boxes
Blick-Williams Co., Indianapolis, Ind
Heise & Brauer, Chicago, Ill
Signal Mail Box Co., Joliet, Ill
Smith Bros. Mfg. Co., Chicago, Ill

Meat Choppers
Enterprise Mfg. Co. of Pa. Philadelphia, Pa

Metal Lath
Wheeling Corrugating Co., Wheeling, W. Va

Metal—Perforated
Harrington & King Perforating Co., Chicago, Ill

Metal Polish
Hoffman, Geo. W., Indianapolis, Ind

Metal Shingles
Burton, W. J. Co., Detroit, Mich
Cortright Metal Roofing Co., Philadelphia
Nat'l Sheet Metal Roof. Co., Jersey City

Miters
Whitacre Mfg. Co., J. E., Rockford, Ill

Molding Sand.
Newport Sand Bank Co., Newport, Ky

Mop Wringers
Eagle Cooperage Wks., Circleville, O

Nickel-Steel Ware
Lalance & Grosjean Mfg. Co., New York, N. Y

Nuts
American Lock Nut Co., Oregon, Ill
Columbus Bolt Works, Columbus, O
Garland Nut & Rivet Co., Pittsburgh, Pa

Oil Cans
Cooney & Geiger, Indianapolis, Ind

Oars
Strand & Youngquist, Minneapolis

Paints
Connors, Wm. Paint Mfg. Co., Troy, N.Y
Dixon, Jos. Crucible Co., Jersey City, N. J
Enterprise Paint Mfg. Co., Chicago
Heath & Milligan, Chicago, Ill

Pencils
Dixon, Jos. Crucible Co., Jersey City, N.J

Perforated Metal
Harrington & King Perforating Co., Chicago, Ill

Photograph Clips
U. S. Clothes Pin Co., Montpelier, Vt

Pistols
Stevens, J. Arms & Tool Co., Chicopee Falls, Mass

Planes
Stanley Rule & Level Co., New Britain, Ct

Pumps
Beckman Bros., Des Moines, Ia
Berger Mfg. Co., Canton, O
Hess-Snyder Co., Massillon, O

Punches
American Lock Nut Co., Oregon, Ill
Bertsch & Co., Cambridge City, Ind
Globe Mch. & Stamp. Co., Cleveland, O
Niagara Mch. & Tool Wks., Buffalo, N.Y
Sattley Stacker Co., Indianapolis, Ind
Weiss, H. & Co., New York, N.Y

Ranges
Belleville Steel Range Co., Belleville, Ill
Champion Steel Range Co., Cleveland, O
Culter & Proctor Stove Co., Peoria, Ill
Pittsburg Stove & Range Co., Pittsburg, Pa

Rasps
Disston, Henry & Sons., Philadelphia, Pa

Refrigerators
Herrick Refrigerator Co., Waterloo, Ia

Registers
Ferro Steel Co., Cleveland, O
Henry & Scheible Co., Cleveland, O
Independent Steel Register Co., Cleveland, O
Mueller, L. J., Furn. Co., Milwaukee, Wis
Schwab & Sons Co., Milwaukee, Wis

Repairs—Stove, Etc.
Dust, Wm. T. Co., Detroit, Mich

Rifles
Stevens, J. Arms & Tool Co., Chicopee Falls, Mass

Rivets
Hungerford, U. T., Brass & Copper Co., New York, N. Y

Roofing
Johns-Manville, H. W. Roofing Co., New York, N. Y
Niles Corrugating Co., Niles, O

Roofing—Asphalt
Stowell Mfg. Co., Jersey City, N.J

Roofing—Iron and Steel
Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Art Metal Co., Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Friedley & Voshardt, Chicago, Ill
Garry Iron & Steel Co., Cleveland, O
La Crosse Steel Roof. Co., La Crosse, Wis
Nat'l Sheet Metal Roof. Co., Jersey City
Schoedinger, F. O., Columbus, O
Sykes Steel Roofing Co., Chicago, Ill

Roofing Cement
Connors, Wm. Paint Mfg. Co., Troy, N.Y
Garry Iron & Steel Co., Cleveland, O

Roof Paint
Conners, Wm. Paint Mfg. Co. Troy, N.Y
Dixon, Jos. Crucible Co., Jersey City, N.J
Garry Iron & Steel Co., Cleveland, O

Rules
Lufkin Rule Co., Saginaw, Mich
Stanley Rule & Level Co., New Britain, Ct

Sad Irons
Enterprise Mfg. Co. of Pa. Philadelphia, Pa

Safety Razors
Gillette Safety Razor Co., New York, N Y

Sash Balances
Pullman Mfg. Co., Rochester, N.Y

Saws and Saw Sets
Atkins, E. C. & Co., Indianapolis, Ind
Diamond Saw & Stamping Co., Buffalo N. Y
Disston, Henry & Sons, Philadelphia, Pa
Goodell-Pratt, Greenfield, Mass

Scales
Beckman Bros., Des Moines, Ia

Screens—Perforated Metal
Harrington & King Perforating Co., Chicago, Ill

Screens—Radiator
Harrington & King Perforating Co. Chicago, Ill

Screws
Columbus Bolt Works, Columbus, O

Screw Drivers
North Bros. Mfg. Co., Philadelphia, Pa

Scuttle Openers
Bickelhaupt, G., Skylight Works, New York, N. Y

Shears—Sheet Metal
Bertsch & Co., Cambridge City, Ind
Niagara Mch. & Tool Wks., Buffalo, N.Y
Weiss, H. & Co., New York, N.Y

Sheet Metal Specialties
Friedley & Voshardt, Chicago, Ill
Gerock Bros. Mfg. Co., St. Louis, Mo

Sheets—Black and Galvanized
Berger Mfg. Co., Canton, O
Parkersburg Iron & Steel Co., Parkersburg, W. Va
Wheeling Corrugat'g Co., Wheeling, W. Va

Sheets—Planished
Ward-Dickey Steel Co., Indiana Harbor, Ind

Sheets—Steel
Parkersburg Iron & Steel Co., Parkersburg, W. Va
Ward-Dickey Steel Co., Chicago, Ill

Shelving—Hardware
Heller & Co., Mont Clair, N. J

Shot Guns
Stevens Arms & Tool Co., Chicopee Falls, Mass

Shovels
Avery Stamping Co., Cleveland, O

Sifters
Stuber & Kuck, Peoria, Ill

Skylight Gearing
Bickelhaupt, G., Skylight Works, New York, N. Y
Weiss, H. & Co., New York, N.Y

Slate
Auld & Conger Co., Cleveland, O
Johnson, E. J. & Co., New York, N.Y
O'Halloran & Jacobs, Pittsburgh, Pa

Soldering Furnaces
Brainard Mfg. Co., Bryon, O
Clayton & Lambert Mfg. Co Detroit
Diener, Geo. W. Mfg. Co., Chicago
Turner Brass Co., Chicago, Ill

Sporting Goods
Cycle Skate & Spt. Goods Co., New York
Enterprise Mfg. Co., Akron, O

Squares, Machinists'
Disston, Henry & Sons, Philadelphia, Pa
Duby & Shinn, New York City, N.Y
Stanley Rule & Level Co., New Britain, Ct

Stampings—Sheet Metal
Avery Stamping Co., Cleveland, O

Steel Brick and Stone Siding
Wheeling Corrugat'g Co., Wheeling, W. Va

Steel Brakes
Dreis & Krump, Chicago, Ill

Steel Roofing
Sykes Steel Roofing Co., Chicago, Ill

Step Ladders
Adler, H., Co., Carnegie, Pa

Stoves and Ranges
Beckwith, P. D. Estate, Dowagiac, Mich
Belville Stove & Range Co., Belville, Ill
Culter & Proctor Stove Co., Peoria, Ill
Hess, Snyder Co., Massillon, O
Marion Stove Co., Marion, Ind
Pittsburgh Stove & Range Co. Pittsburgh, Pa
Ringen Stove Co., St. Louis, Mo
Schill Bros. Co. Crestline, O
South Erie Iron Works, Erie, Pa
Western Stove Works, Peoria, Ill
Willard, Wm. G., St. Louis, Mo

Stoves—Gas
Adler, H., & Co., Carnegie, Pa
Clark, Geo. M. Co., Chicago, Ill
Fanner Mfg. Co., Cleveland, O
Pittsburgh Stove & Range Co., Pittsburgh, Pa
Ringen Stove Co., St. Louis, Mo

Stove Carriers
Kramer Bros. Fdy. Co., Dayton, O

Stove Cement
Dixon, Jos. Crucible Co., Jersey City, N.J

Stove Clay
Bridgeport Crucible Co., Bridgeport, Ct

Stove Mats
Stuber & Kuck, Peoria, Ill

Stove Pipes
Hemp & Co., St. Louis, Mo
Ohio Stove Pipe & Mfg. Co., New Philadelphia, Ohio
Wheeling Corrugat'g Co., Wheeling, W. Va

Stove Patterns
Cope Pattern Wks., Detroit, Mich
Quincy Pattern Co., Quincy, Ill
Vedder Pattern Works, Troy, N.Y
Weller Pattern Co., Quincy, Ill

Stove Pipe Thimbles
Stuber & Kuck, Peoria, Ill

Stove Polish
Black Silk Stove Polish Wks., Sterling, Ill
Cole, G. W. Co., New York, N. Y
Silver Leaf Stove Polish Co., Indianapolis, Ind

Stove Repairs
Brauer, A. G., St. Louis, Mo
Kramer Bros. Fdy. Co., Dayton, O
Manufacturers' Stove Repair Co., Chicago

Stove Trimmings
Fanner Mfg. Co., Cleveland, O

Strops
Sealskin Swaty Strop Co., Ottumwa, Ia

Sugar Kettles
Sperry & Co., Batavia, Ill

Tapes
Lufkin Rule Co., Saginaw, Mich

Test Tube Holders
U. S. Clothes Pin Co., Montpelier, Vt

Thermometers—Oven
Evans Stamping & Plating Co., Taunton, Mass

Thermostats
Howard Thermo. Co., West Oswego, N. Y

Thumb Tacks
Hawkes-Jackson Co., New York

Tin—Perforated
Harrington & King Perforating Co., Chicago, Ill

Tinners' Tools
Dreis & Krump, Chicago, Ill

Tinplate
Berger Mfg. Co., Canton, O
Canton Art Metal Co., Canton, O
Eller, J. H. & Co. Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Garry Iron & Steel Co., Cleveland, O
Illinois Roofing & Supply Co., Chicago, Ill
Lee-Glass-Andreesen Hdw. Co., Omaha
McClure Co., Philadelphia, Pa
Merchant & Evans Co., Philadelphia, Pa
Schoedinger, F. O., Columbus, O

Tinware
Lalance & Grosjean Mfg. Co., Chicago
Roseland Can & Spec. Co., Rockford, Ill
Stuber & Kuck, Peoria, Ill
Sturges & Burn Mfg. Co., Chicago

Trowels
Atkins & Co., Indianapolis, Ind
Avery Stamping Co., Cleveland, O
Disston, H. & Sons, Philadelphia, Pa
Griffin Mfg. Co., Erie, Pa

Tubs and Pails
Wheeling Corrugat'g Co., Wheeling, W. Va

Typewriters
Remington Typewriter Co., Chicago

Valve Regulators
Howard Thermo. Co., West Oswego, N. Y

Ventilators
Canton Mfg. Co., Canton, O
Friedley & Voshardt, Chicago, Ill
Globe Ventilator Co., Troy, N.Y
Merchant & Evans Co., Philadelphia, Pa
Powers Bros., Streator, Ill

Wagons
Sycamore Wagon Works., Sycamore, Ill

Washing Machines
Benbow-Brammer Mfg. Co., St. Louis, Mo
Brammer, H. F. Mfg. Co., Davenport, Ia
White Lily Washer Co., Davenport, Ia

Wire Goods
Denning Wire & Fence Co., Cedar Rapids, Ia
Pittsburgh Steel Co., Pittsburgh, Pa

Wants and Sales.

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS

HUBERT E. PECK, 623 F St., N. W., Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications."

For Sale—Hardware stock and building. This is a fine, clean, up-to-date $4,000 to $5,000 stock (can be reduced). Located at Livermore, Humboldt Co., Ia. Good farming country; nice town, good graded schools, four churches, brick and tile factory, two railroads, about 20 business houses, two hotels, two lumber yards, three elevators, plenty of timber, and a pretty place; ¼ mile from Des Moines river; a good place to live, bring up your children, and make money. Prices not all cut to pieces; land trade not considered. Store and tin shop, wareroom, 22x140, two-story. Living rooms above. Part time on building, if wanted; will give a bargain, if taken soon. Business established by me for 20 years. Rheumatism and poor health reasons for selling. Write or call on J. W. Leighton, Livermore, Iowa. 16-3t

For Sale—Cornice, tin and furnace shop in one of the best cities in Colorado. Business averages about $8,000 a year; good opening for out of town work. Poor health reason for selling. Address T. C. S., care THE AMERICAN ARTISAN, Chicago, Ill. 16-3t

For Sale—Hardware stock, with tin shop in connection; will invoice about $25,000.00; in good town and farming country in Central Wisconsin, town of 1,000 population. Satisfactory reason for selling. Address Junior, care THE AMERICAN ARTISAN, Chicago, Ill. 16-3t

For Sale—One No. 1 20-inch Gutter Beader; one No. 0 30-inch Gutter Beader; one No. 1 Tin Pipe Former, with 1½-inch hole; one large beading machine, and one Peckham's stove pipe crimper. Address Bartholomew Hdw. Co., Ashley, Ohio. 16-3t

Wanted—As a side line, a granite ware line, for Nebr., on commission. Good goods only. Address P. A. Williams, Strawberry Point, Iowa. 16-3t

For Sale—A clean, well assorted stock of builders' hardware and paints; entire stock will invoice about $4,000; rent reasonable; sickness the reason for selling; located in Chicago. Address R. & S., care THE AMERICAN ARTISAN, Chicago, Ill. 15-3t

For Sale—Hardware stock of about $3,000 in good town in Southeastern South Dakota; good clean stock; tin shop in connection. Address J. J., care THE AMERICAN ARTISAN, Chicago, Ill. 15-3t

For Sale—A set of second-hand tinner's and plumber's tools. Address Freye & Senne, Nunda, Ill. 15-3t

Wanted—A competent set of up-to-date gas heater and hot plate patterns; send description or photos and state prices. Address E. H. Kraus, 140 Broadway, Cleveland, Ohio. 15-4t

For Sale—General stock of merchandise; double stone store, wagon, scales and coal business. Address Owner, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 14-3t

For Sale—Hardware stock of about $3,500 in town of 1,250 population in Central Wisconsin. This is a good, clean stock and a very good chance for a party wishing to locate in a farming country. Old age of senior partner cause of change. Address J. G. & S., care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 14-3t

For Sale—Stock of hardware, stoves and tinware in a live town of 5,000 population in Eastern Ill. Stock will invoice about $5,000.00. The best of reasons for selling; old age and poor health. Address The Best, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 14-3t

Exchange—A choice quarter of Clay Co., Minnesota, land to trade for a hardware stock. Adjoining lands produce 25 to 30 bu. of wheat and from 40 to 80 bu. of oats. Address Square Deal, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 14-3t

For Sale—A good clean stock of hardware, stoves, tinware, queensware and good implements. Also tinshop in building. Located in a good farming community in eastern Iowa. Will sell or retain implement business. Good reason for selling. Address, No. 1, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. ufn

TINNERS' TOOLS.

For Sale—Tinshop with small stock of stoves, tinware, roofing and spouting; located in small town in Central Ohio; no competition; poor health reason for selling out. Address Mc, care of THE AMERICAN ARTISAN, Chicago, Ill. 15-3t

HELP WANTED.

Wanted—Experienced tinner; must understand furnace work; steady employment to good man; must be strictly temperate; state experience and wages wanted; references required. Address D. S. Purdy & Sons, Highland Park, Ill., suburb of Chicago. 16-3t

Wanted—Good hardware salesman to sell two patented specialties of real merit as a side line; ready sale and in daily use. Address S. A. Peck Hdw. & Mfg. Co., Box E, Berlin, Wis. 16-3t

Wanted—A good all around tinner for inside and outside work; charge of shop. Good wages; steady job. Apply at once. G. B. Watrous & Son, Waukegan, Ill. 16-3t

Wanted—At once, a good tinner and furnace man; must clerk in store and be willing to canvass country; honest and temperate. Prefer man accustomed to working in country towns. Address Box 108, Kirkland, Ill. 16-3t

Wanted—Tinsmith, one competent to put on tin and galvanized roofing, spouting, guttering, etc. Steady job for the right man. Address D. A. Clark, Van Wert, Ohio. 16-3t

Wanted—At once, plumber. Steady job for right man. Must have or get state license. State wages wanted. Address State, care THE AMERICAN ARTISAN. 16-3t

Wanted—Stove salesman, for Kansas State age and salary expected. Address The Art Stove Company, Chicago, Ill. ufn

Wanted—Retinner. A reliable man that understands how to tin and retin milk cans, stamped ware, etc. Also a man with full knowledge of galvanizing tubs and pails. State experience, age and salary wanted. Address Superintendent, Flats 3, 183 14th St., Milwaukee, Wis. 16-2t

Wanted—Tinner with some knowledge of furnace and plumbing work, also capable to clerk in store. Steady work the year around. State wages and age in first letter. Address Johnson Bros., New Castle, Neb. 16-3t

Wanted—Two first-class tinners. Wages 35c per hour, with steady work. No combination mechanics wanted. No boozefighters need apply. Address C. S., care THE AMERICAN ARTISAN, Chicago, Ill. 16-3t

Wanted—By a wholesale stove house, an experienced stove porter for trucking stoves and who understands repairing thoroughly; must be strong and strictly sober; steady job to the right man; references required. Address Wholesale, care THE AMERICAN ARTISAN. 16-3t

Wanted—Tinner; young man who can do ordinary shop and outside work; not necessarily an expert; must be temperate; state wages wanted. Address H, care THE AMERICAN ARTISAN, Chicago, Ill. 15-3t

Wanted—At once, a good reliable tinner; strictly temperate; steady work and good wages to right man; Nebraska man preferred; references. Address J. V. Hyder, York, Neb. 15-3t

Wanted—A good, sober, industrious young tinner who has had one or more years' experience in shop and can do outside work, such as roofing, spouting, etc.; also help in hardware store; state wages. Address Downer & Fairchild, Davison, Mich. 15-3t

Wanted—Steady position by a first-class tinner; have knowledge of general job and bench work; would like bench work in factory; am strictly honest, sober and reliable; American; age 37; married. Address A. J. Bridges, Sunny Vale, Cal. 15-3t

Wanted—At once, a tinner, one who can do slate, tin and furnace work; steady work the year around and good wages. Address Schenfler & Harman, Upper Sandusky, Ohio. 15-4t

For Sale—Stock of hardware and two-story brick building, 22x80 feet, situated in town of 1,000 in East Central Wisconsin; good farming country, dairying, stock raising, potatoes, grain and sugar beets the principal industries; stock invoices about $4,000; if interested it will pay you to investigate. Address W. & J., care THE AMERICAN ARTISAN, Chicago, Ill. ufm

Wanted—Young man with thorough knowledge of furnace business and general tin work; one with some experience in pipe fitting preferred; state experience and wages wanted. Address E. C. Barnes, Mitchell, S. D. 15-3t

Wanted—Good all around tinner; permanent position; prefer one who has had some experience at plumbing and hot water heating; state age and wages wanted. Address E. C. Dedrick, Langdon, N. D.

Wanted—A first-class tinner; good workman, sober, reliable and speedy; steady work for the right man. Address A. V. Hewitt, Punxsutawney, Pa. 15-3t

Wanted—An experienced tinner; one who understands furnace work; good salary and steady employment to right man with good habits. Address Lock Box 244, Coggan, Iowa. 14-3t

For Sale—Good clean stock of hardware and building with complete tinshop in connection; stock will invoice from $4,000 to $5,000; all in good condition and up-to-date; located at Livermore, Iowa; surrounded by good farming country; good schools, churches, brick and tube factory, two railroads, two hotels, lumber yards, about 20 business houses and plenty of tinners; good place to make money and prices are not cut to pieces; store, tin shop and warerooms 22x140 feet; nice living rooms above; part time on building and lot if wanted; no land trade considered; big bargain if taken at once; business established for 20 years; poor health reason for selling out. Address J. W. Leighton, Livermore, Iowa. 15-5t

Wanted—At once, an all-around tinner. Steady position. Address Grebe Hdw. & Harness Mfg. Co., Barrington, Ill. 14-3t

Wanted—A good tinner, steady job for the right man. Address Stephenson & Studeman, Madison, Wis. 14-3t

Wanted—An all-around tinner, plumber, furnace and hot water and steam heat man. Must know how to wipe a joint; also to figure on jobs. Good wages to right man. Address Webb & Ziegler Hdw. Co., Marysville, Ohio. 14-3t

Wanted—At once, a good tinner, good on roofing, spouting and general job work, one able to do inside work preferred. Good wages and steady job to a good man. Address C. H. P., 415 Franklin St., Michigan City, Ind. 14-3t

Wanted—Steady work for first-class tinner. Must be A1 mechanic on all general work in job shop. Must be able to do furnace work right. Strictly sober and willing to hustle; none other need apply. State wages wanted in first letter. Address Box 972, Hartford City, Ind. 14-3t

Wanted—A good tinner, who can do plumbing and work in hardware store. An all-around man, who is willing to do anything that comes along. Steady job for the right man; no boozer; state wages and experience in first letter. Address J. B. Thomas, Lyons, Neb. 14-3t

Wanted—Good all-around tinner to do inside and outside work, also furnace work and some knowledge of plumbing; must be able to clerk in store. Steady work the year around to the right man. German preferred. State wages wanted. Address P. O. Box 513, Holstein, Iowa. 14-3t

HELP WANTED.

Wanted—At once, a good plumber and gas fitter; one that can do tin work. Married man preferred; steady work by the year. State wages, age and give references in first letter. Address J. V. Chryst, Morrison, Ill. 14-3t

Wanted—Tinner and furnace man. State wages wanted. Address 223, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 14-3t

Wanted—An honest, sober and industrious tinner and furnace man at once; work the year around. State wages and references in first letter. Address Guard & Bishop, LeRoy, Ill. 14-2t

Wanted—Tinners at once; steady work; good pay. Address Churchill Hdw. Co., Galesburg, Ill. 14-3t

Wanted—A plumber, one who understands tin work preferred; good all-around man; must be sober and honest. References required; good wages and steady job. Address Lee's Hdw. Co., Eveleth, Minn. 14-3t

Wanted — An experienced hardware clerk, married or single. Good references required. Write or apply at once. State age, experience and wages wanted. Address G. B. Watrous & Son, Waukegan, Ill. 14-3t

Wanted—First-class salesman, by leading furnace and boiler manufacturer. Only men who have had actual experience in warm air, steam and hot water heating wanted. Prefer men who have sold goods to the trade. Excellent opportunity for the right man. Established trade in territory. Address O. B. J., care THE AMERICAN ARTISAN, Chicago. U. F. N.

Wanted—At once, a good, clean cut, experienced stove salesman to sell a good grade low-priced line of stoves and ranges in Iowa. These goods, with the price and freight advantage, are an easy money maker for the salesman. None but first-class salesman need apply. Also want man for South Dakota. Send references. Write at once. Address Cascaden Mfg. Co., manufacturers Progressive Steel Stoves and Ranges, Waterloo, Iowa. 13-4t*

Wanted—First-class tinner and sheet metal man, capable of taking charge of shop; must be sober; good wages and steady work in live Western town. Address J. A. Roell Hdw. Co., Minot, N. D. 14-3t

Wanted—At once, a competent furnace and boiler salesman for the State of Illinois. Address Furnace Salesman, care of THE AMERICAN ARTISAN, 69 Dearborn, Chicago. U. F. N.

Wanted—A good hardware clerk; must be a good salesman, good stock keeper, thoroughly understand sewing machines and have some knowledge of window dressing and bookkeeping. Address Clerk, care THE AMERICAN ARTISAN. 14-3t

For Sale—Our entire set of tinners' tools, including squaring shears; will sell at a bargain if sold at once. Any one wishing a bargain please write at once as above will be sold the first chance. Address Frank Brooking, Macomb, Ill. 14-3t

SITUATIONS WANTED.

Situation Wanted—By a practical man that understands all branches of the stove and range business, including gas ranges, both in manufacturing and selling ends. Address Practical, care THE AMERICAN ARTISAN, Chicago, Ill. 16-8t

Situation Wanted—By experienced tinner on general job and furnace work; must be steady; state wages in first letter; am married man; can speak German. Address German, care THE AMERICAN ARTISAN, Chicago, Ill. 15-3t

Wanted—A good practical tinner and furnace man, one who can do plumbing preferred; wages $15 per week; steady job; references. Address A16, care THE AMERICAN ARTISAN, Chicago, Ill. 15-3t

Situation Wanted—At once, by a good, alive, up-to-date hardware man as clerk and to do some tinning work. Have had four years' experience as clerk, bookkeeper and some shop and outside work; can furnish the best of references. Position desired where there is a chance for advancement. Address Box 100, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 14-3t

Situation Wanted—By tinner in or near Chicago. Steady job wanted. Address A. F., care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 14-3t

SPECIAL NOTICES.

WANTED.

First-class salesmen, by leading furnace and boiler manufacturer. Only men who have had actual experience in warm air, steam and hot water heating wanted. Prefer men who have sold goods to the trade. Excellent opportunity for the right men. Established trade in territory. Address O. B. J., care AMERICAN ARTISAN, Chicago. u.f.n.

WANTED.

A large foundry in Pennsylvania making stoves, furnaces and boilers, is in need of a foreman metal pattern maker. Must be absolutely first-class. State wages wanted and references. Address, "Steady Job," care AMERICAN ARTISAN.

Hardware Stock Wanted

In exchange for good improved farm in Iowa or Illinois. Address Farm, care of The American Artisan.

WANTED

Experienced tinner and furnace man. Must be steady and sober. State ability, experience and salary.

MORGAN,
1-2t. Starkweather, N. Dak.

Special Notice.

Wanted—Traveling Salesman. To sell a well known line of stoves and ranges. Men wanted for Ohio and Minnesota, must be competent and know the trade. Good salary. Address H. W., care of AMERICAN ARTISAN, Chicago, Ill.

WANTED

Traveling salesman to sell the Matchless Steel Ranges on commission. Address, Landay Steel Range Co., St. Louis, Mo.

FOR SALE.

One Double-Truss Improved 10-ft Brake. Has been used but a few months; in first-class condition—good as new.

THE W. H. MULLENS CO.,
4t- Salem, Ohio.

FOR SALE

A Hardware and Implement Specialty Manufacturing business, started 14 years ago in a small way *without capital*, has made a living for proprietor and family during the time and gained a surplus of over $20,000, is growing rapidly and is paying now much better than ever. Capital required to buy and run the business about $12,000. Reasons for selling, age and failing health of proprietor. For full particulars address Lock Box 136, Freeport, Ill.

Manufacturing Plant For Sale.

Products, small farm implements, stoves and bobsleds; sale imperative; can be turned over with established business as going concern; located in a Michigan city; labor conditions satisfactory. Address DETROIT TRUST CO., Detroit, Mich.

WANTED

Wood Pattern Makers on Stove work. Address "Pattern Maker," care of AMERICAN ARTISAN.

u. f. n.

THERE IS NO BETTER WAY
BETWEEN
CHICAGO
INDIANAPOLIS
AND
CINCINNATI
THAN THE
MONON ROUTE
4 TRAINS A DAY 4

Standard and Compartment Sleepers on Night Trains. Parlor and Dining Cars on Day Trains.

CHAS. H. ROCKWELL, Traffic Manager — FRANK J. REED, Gen. Pass. Agt.
CHICAGO

MANUFACTURERS

Contemplating establishing plants in the West should take advantage of a location on

THE NORTH WESTERN LINE
C. & N. W. RY.

Chicago & North-Western Ry.

WHICH REACHES THE FAMOUS
Water Powers, Coal Fields, Iron Ore Ranges, Hard & Soft Lumber Districts
of the West and Northwest, and affords the best means of transportation to the markets of the world. For further particulars apply to

MARVIN HUGHITT, Jr., Freight Traffic Mgr. — E. D. BRIGHAM, Gen. Freight Agt.
CHICAGO.

An Appreciation.

TO THE AMERICAN ARTISAN:
We wish to thank you very much for the A1 write-up you gave us in your paper and wish to also express the fact that our returns in replies to our advertisement in THE AMERICAN ARTISAN so far have been very gratifying.
Yours truly,
STRAND-YOUNGQUIST COMPANY.
Minneapolis, Minnesota, March 30, 1906.

BLACK SILK

BLACK
Black SILK in quality.
Lasts longer.
Always used for fine exhibition work.
Costs more but cheapest to use.
Keeps in any climate.

SILK
Shine that stays.
It never dries out nor rusts through the cans.
Liquid and paste same quality.
Known and recognized as the standard.

STOVE POLISH

West Liberty, Iowa, April 4, 1906.
Black SILK Stove Polish Works, Sterling, Ill.

Dear Sirs: I want to acknowledge receipt of a case of the finest stove polish it has ever been our pleasure to use.

My blackers say that Black SILK is finer than ever. I use and sell it exclusively and have for ten years. It has made me more friends and customers than any article that I have ever kept in stock. I only have to sell it once. It is always called for afterwards and nothing else will take its place.

I feel it my duty to encourage the manufacturer who furnishes me good reliable goods and tries to improve them without raising the price.

It is simply wonderful what Black SILK Stove Polish will do.

Respectfully yours, J. F. DOTY.

WE WILL REFUND THE MONEY.—To prove to your own satisfaction that quality does not mean expense, order a case of Black **SILK** Stove Polish from your jobber; all sell it as their highest priced and finest grade. If it does not do what we claim WE WILL REFUND THE MONEY. No wasting in dusting off in using, goes further, lasts longer and makes that Black **SILKY**, glossy shine that stays, does not dry out nor rust through the cans. Black **SILK** Stove Polish must be made right at any cost. Put up in 5 pound cans and family sizes, liquid and paste.

Locations for Industries

ON

THE ERIE, THE COMMERCIAL RAILROAD

Chicago to New York

The Erie Railroad System's Industrial Department has all the territory traversed by the railroad districted in relation to resources, markets and advantages for manufacturing, can advise with manufacturers of specific products as to suitable locations, and furnish them with current information of a comprehensive nature dealing with the project in its full relation to manufacture and commerce.

The Erie is one of the greatest of trunk lines. Its own rails connect the two largest cities of America. Every section of the System has its particular merits. Profitable locations exist. It has great general and coal, oil and natural gas resources.

It is important in this age of modern facilities for manufacturers to locate where they can obtain side tracks so as to receive from and ship directly into cars at the factory. Information can be promptly furnished in this connection about every point on the system between New York and Chicago.

Manufacturers' inquiries as to locations are treated in strict confidence, and absolutely reliable information, so as to promote permanent traffic, is furnished. Address,

LUIS JACKSON
Industrial Commissioner
Erie Railroad Company.
21 Cortlandt Street, New York.

DIXON'S STOVE CEMENT.

Applied easily. Dries rapidly. The best repair for cracked or worn fire-brick.
Circular 18-L and sample upon request.
JOSEPH DIXON CRUCIBLE CO., ... JERSEY CITY, N. J.

BOOKS BY MAIL

THE Publisher of the American Artisan will take pleasure in supplying books of whatever character, at catalogue prices, prepaid by mail, to any address, on receipt of price. The following are lines specially represented:

Sheet Metal Working. The Foundry.
The Workshop. Heating and Ventilating.
Plumbing and Drainage.
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DANIEL STERN,
PUBLISHER AND BOOKSELLER
69 Dearborn Street CHICAGO

THE VICTOR COAL HOD

Gives perfect and continued satisfaction. It is strongly built, has a reinforced bottom, and is guaranteed to be

The Best in the World

We have an enormous business; we can't afford to lose it; consequently we are obliged to make a superior article.

THE VICTOR STAMPING CO., Broadway, Loveland, Ohio

PARKERSBURG BLUE

The perfect Steel Sheet. **High quality.**
Low price. **Send for samples.**

The Parkersburg Iron and Steel Company

PARKERSBURG, W. VA.

YALE

Russia finish, pat. lock

STOVE PIPE.

It is made of a very high grade of uniform color Blue Polished Steel, and is coated to prevent rusting. Made in all sizes.

Packed twenty-five and fifty joints to crate. For sale by the jobbing Hardware Trade throughout the United States.

MFD. BY
HEMP & CO.
2nd & Chouteau Ave.
ST. LOUIS.

In the event your jobber does not handle this pipe send your inquiries to us

GOSSETT

Detachable Suspension

HINGES

(For full length screens)

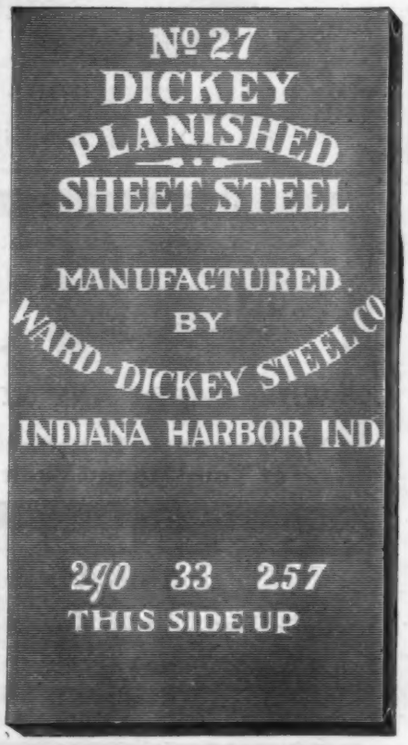
SELL

ONE REASON: Carpenters and Builders prefer them. Every mail brings inquirings—which are referred to the hardware dealer.

Are you prepared to take care of these?

A card will bring a sample pair.

F. D. Kees Mfg. Co.
(Desk A)
Beatrice, Nebraska
SOLD BY MANY HARDWARE JOBBERS.



HAMMER Planished

OPEN HEARTH STEEL SHEETS

For Stoves, Ranges, Stove Pipe, Elbows, Etc.

Soft — Tough — NEVER Breaks.

Will take long and high heats and hold its color. Gauges No. 18 to 28.

Send for Price List.

Manufactured by

Ward-Dickey Steel Co.

INDIANA HARBOR, IND.

PATTERNS

For Stoves and Heaters

First-class in wood and Iron.

Vedder Pattern Works, Troy, N. Y.

Established 1835

QUINCY PATTERN CO
IRON & WOOD
STOVE PATTERNS
QUINCY, ILL.

STOVE REPAIRS

MANUFACTURERS' STOVE REPAIR CO.

517-539 Diversey Boul., CHICAGO

Prompt Shipments **Give us a Trial**

The GEO. W. COPE Stove Pattern Works Cor. Brush & Woodbridge Streets DETROIT, MICHIGAN.

WELLER PATTERN CO

DESIGNS and ESTIMATES FURNISHED FOR ALL KINDS OF STOVE PATTERNS

QUINCY, ILL.

BARKEEPER'S FRIEND

Marble, Glass, Nickel, Brass, Copper, Tin and German Silver

can all be cleaned and polished with it easier than with anything else.

Price 25c per lb.

Highest Award:—Chicago World's Fair, 1893; Louisiana Purchase Exposition, St. Louis, Mo., 1904.

Let us send you a FREE SAMPLE

GEO. WM. HOFFMAN
295 E. Washington St.
INDIANAPOLIS, - IND.

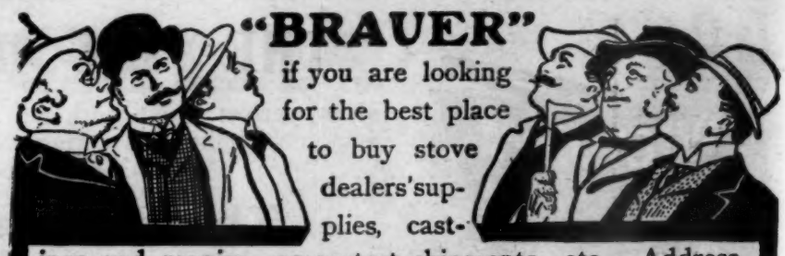
For Sale by Jobbing Trade.

SILVER LEAF STOVE POLISH

Stove Polish That's Black.
Stove Polish That Lasts.
Stands 1800 Degrees.

Aluminum Paint also made by the

SILVER LEAF STOVE POLISH CO.,
INDIANAPOLIS, IND.



"BRAUER"

if you are looking for the best place to buy stove dealers' supplies, castings and repairs—promptest shipments, etc. Address,

316-318 North Third St. St. Louis, Mo.

Champion Stove Clay

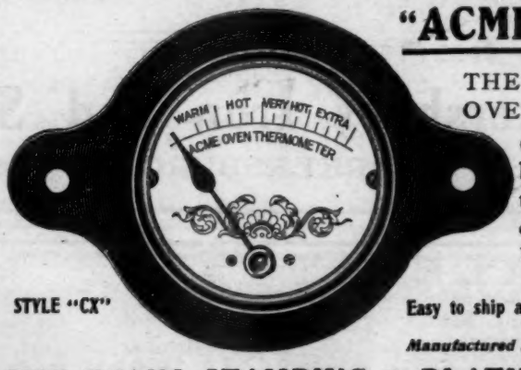
The only Stove Lining made of crucible materials.

Packed in 2½ lb., 6 lb. and 10 lb. pasteboard boxes.

Order it from your jobber.

The best and most refractory lining made.

Bridgeport Crucible Co., Bridgeport, Conn.



STYLE "CX"

"ACME" OVEN THERMOMETER

THE MOST RELIABLE OVEN THERMOMETER on the Market, as has been proved by some of the largest manufacturers of Stoves in the United States.

Easy to ship and nothing to get out of order.

Manufactured by

THE EVANS STAMPING & PLATING CO., TAUNTON, MASS.

Western Agent: C. H. MATTHEWS, Detroit, Mich.

Manufactured by

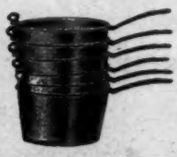
THE KRAMER BROS. FDY. CO.

DAYTON, OHIO

Price each, $3.00 Made of Heavy Harness Leather

WILL CARRY ANY STOVE OR RANGE MADE

We Guarantee Satisfaction or Your Money Back



THE ROSELAND GOODS
ARE MADE ON HONOR

The advantage of this sifter is so perceptive that it sells at sight.

NEW ARTICLE IN NEXT ISSUE

Roseland Can & Specialty Co.
ROCKFORD, ILL.

New Standard Flour Sifter. Patented

Why do some business men set aside sums of money for advertising that would be enough for some people to live on?

DON'T TAKE TAINTED MONEY

"Substitution" profits are neither clean nor profitable. You betray yourself and your customer when you sell "something just as good" as

3 in One

There honestly isn't any other oil even equal to "3 in One" for lubricating, cleaning, polishing and preventing rust. Every customer is bound to learn this—and go where he can get "3 in One" without quibble or query. "3 in One" profits are 50% and 100%. We will advertise for you. Write us to-day.

G. W. COLE COMPANY, COR. BROADWAY AND LIBERTY STREET, **NEW YORK CITY.**

NONE BEATS THE

Uncle Sam Damper

It is light, easily adjustable and enduring.

The plate is stamped from best nickled steel and is corrugated to prevent warping. The stem consists of forged steel sharply pointed, notched to engage edge of plate, and is held absolutely in place.

Nothing better on the market.

SEND FOR FREE SAMPLE.

Sayre Stamping Co. Sayre, Pa.

Just a few of our

Stove Appurtenances

We manufacture a great variety of them. Find out what they are.

The Fanner Mfg. Co.

CLEVELAND, - OHIO

YANKEE ALL STEEL DAMPER CLIP

WE CLAIM BEST SHEET STEEL DAMPER MADE. WE WILL SEND SAMPLE FREE TO DOUBTERS. CHEAPEST DAMPER MADE. BEST AND EASIEST TO GET IN OR OUT.

We guarantee our prices against any sheet iron damper that in any way compares.

THE S. M. HOWES CO., 40-46 Union St., Boston, Mass.

THE

"BIG FOUR ROUTE"

passes through an interesting Country every mile of the way

CHICAGO TO

INDIANAPOLIS
CINCINNATI
LOUISVILLE

and all points

SOUTH

AND

SOUTHEAST

Buffet Parlor Cars or Dining Cars on day trains, and Pullman's finest Compartment and Standard Sleepers on night trains. All trains run solid, Chicago to Cincinnati. The only line from Chicago connecting in the Central Union Depot, Cincinnati, with C. & O., Q. & C., L. & N. and B. & O. S. W. Rys. For reservations, etc., call on or address

I. P. SPINING, G. N. A.
238 Clark Street - - - CHICAGO

The Grinding of Lawn Mowers is a Trick!

It's easy to do with one of my grinders.

If you have power, write me.

C. R. ZACHARIAS,
ASBURY PARK, N. J.

GOOD SELLER

WEATHER PROOF

"J-M" ASBESTOS ROOFING

You can materially increase your sales and profits by adding "J-M" ASBESTOS ROOFING. It is a ready seller because it:

1. Has greater fire resisting qualities than any other.
2. It is practically indestructible and not affected by acids, gases or chemicals, because made of a mineral product.
3. Cheaper than tin, iron, shingle or slate roofing.
4. Costs less per year than any other.
5. Is absolutely weather-proof.
6. Is equally suitable for roofs or sidings.
7. No skill necessary to apply it.

Mr. Hardware Dealer: We have an interesting proposition to make you. Write our nearest Branch for full particulars.

NEW YORK
MILWAUKEE
CHICAGO
BOSTON
PHILADELPHIA
ST. LOUIS
PITTSBURG
CLEVELAND

H. W. JOHNS-MANVILLE CO.

Manufacturers of Asbestos and Magnesia Pipe and Boiler Coverings, Asbestos Packings, Roofing, Etc.

100 WILLIAM STREET, NEW YORK

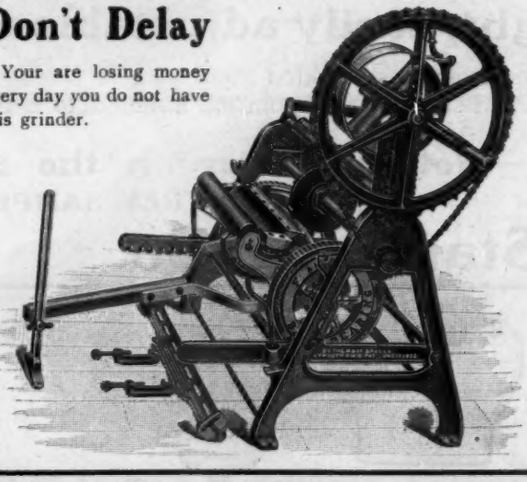
SAN FRANCISCO
LOS ANGELES
SEATTLE
KANSAS CITY
MINNEAPOLIS
LITTLE ROCK
NEW ORLEANS

For Great Britain and Continent of Europe

THE BRITISH JOHNS-MANVILLE COMPANY, Ltd.
No. 81 Fenchurch St., London, E. C. No. 141 Rue Lafayette, Paris. No. 69 Rue d'Angleterre, Brussels.

Don't Delay

Your are losing money every day you do not have this grinder.

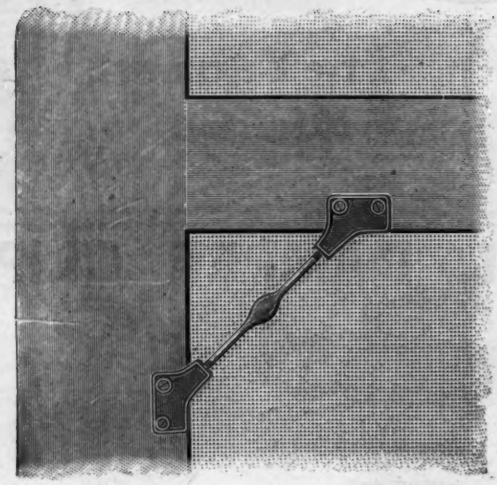


The Ideal Lawnmower Grinder

By its use anyone can sharpen a Lawnmower accurately in fifteen minutes. Takes all unevenness out of cutting parts, gives a perfect clearance, and is a pleasure to operate. Nothing like it on the market, and a big moneymaker.

1906 Model now ready for both hand or power use. Send for circular giving full description and price. Don't delay. Write to-day.

The Root Bros. Co.
Plymouth, Ohio



ARE THE JOINTS of your screen door weak? Brace them up with the Warner—it's a sure cure.

It is easily attached and adjusted and holds the door as firm as a rock.

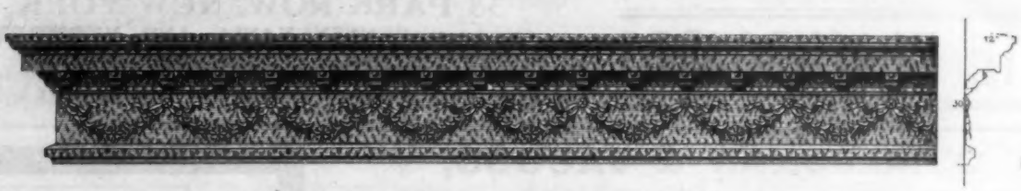
If you have never seen one, it will cost but a postal to get a sample and prices. We will also send you our catalog—it contains 400 good things.

ARCADE MFG. CO., FREEPORT, ILL.

Persistence in Advertising

In the expansion of business now bringing profit to so many manufacturers, advertisers who have made themselves regularly prominent in the past five years have been notable in reaping the rewards of persistent publicity.

Our Kind of Cornice



There is a difference in cornice. Ours is the strong, artistic, durable kind.

Anything in the metal cornice line—Galvanized, Copper, Tin—any style. We illustrate 41 different designs in our large catalog. Buy of the Big Manufacturer.

F. O. SCHOEDINGER, Columbus, O.

Dept. 2 — Our catalog for the asking — 146 N. THIRD STREET 146

ALL STYLES of CORRUGATED ROOFINGS and SIDINGS

Black and Galvanized Sheet Iron or Steel

Send Us All Your Inquiries — **Write for Catalog "D"**

THE NILES CORRUGATING CO.

NILES, OHIO

Our Specialty
INSTANT SHIPMENTS

We Have Our Own
Sheet Mills and Galvanizing Plant

PLECKER'S CORRUGATED EXPANDING CONDUCTORS.

Made of Galvanized Iron in Ten-Foot Lengths without a Cross Seam. Will not burst when full of Ice

CLARK, QUIEN & MORSE, Peoria, Ill.

INDUSTRIES ARE OFFERED LOCATIONS

WITH

Satisfactory Inducements,
Favorable Freight Rates,
Good Labor Conditions,
Healthful Communities,

ON THE LINES OF

THE ILLINOIS CENTRAL R. R.
AND THE
YAZOO & MISSISSIPPI VALLEY R. R.

For full information and descriptive pamphlet address

J. C. CLAIR, Industrial Commissioner,
1 Park Row, CHICAGO.

Bert Tandler, Antigo, Wis., writes:
"There is no doubt that THE AMERICAN ARTISAN is a remarkable paper for the hardware trade; I cannot get along without it."

Lock-Joint Metal Ceilings

are easily erected by any mechanic, at a saving of nearly 50% in labor and furring. The edges are formed on the plates and we furnish (without extra charge) the special tongs for tightening the joints. Only 4 nails to the plate. "Absolutely Dust-Proof."

Write for Catalogue D.

S. Keighley
Metal Ceiling & Mfg. Co.
Pittsburg, Pa.

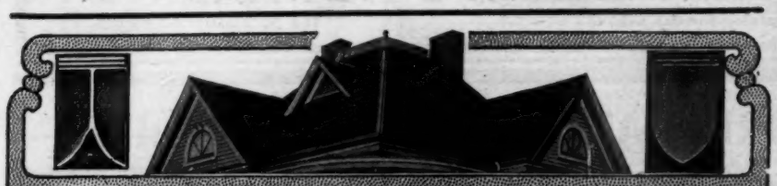
WASHINGTON 1335 F St., N.W. — BALTIMORE 510 W. Pratt St.

ROOFING SLATE
SLATE BLACKBOARDS

E. J. JOHNSON & CO
38 PARK ROW, NEW YORK
Quarries: PENNSYLVANIA AND VERMONT

Prices quoted delivered anywhere. Booklet and complete Price List on application. Wire inquiries given quick attention

O'HALLORAN & JACOBS,
ROOFING SLATE
SLATERS' SUPPLIES.
829-830 Park Building, PITTSBURG, PA.



CORTRIGHT METAL SHINGLES

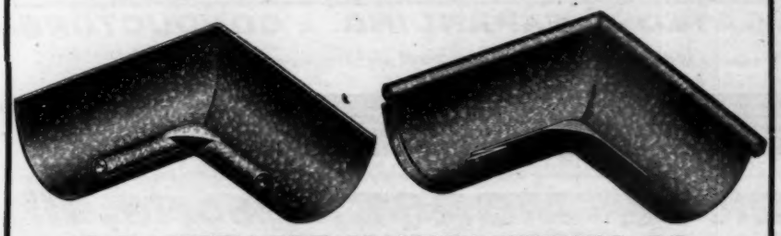
Time was when Tinners didn't get anything but plain tin roof work—now all up-to-date Tinners are finding it profitable to handle Cortwright Metal Shingles

made by

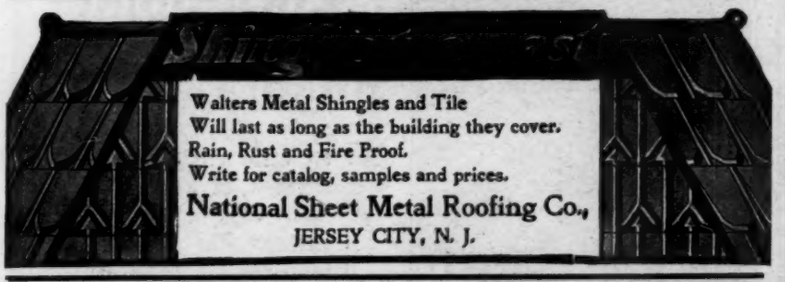
CORTRIGHT METAL ROOFING CO., Philadelphia and Chicago

The Improved One-Piece Miter is now sold by all leading jobbers of hardware and roofing supplies, and manufacturers of pipe and gutter.

One-Piece Miter **One Piece of Metal** **That's all**



J. E. WHITACRE MANUFACTURING CO.
Inventors and Manufacturers **ROCKFORD, ILL.**



There's a good profit in putting up Metal Ceilings—if you do good work and use artistic designs.

Our High Art designs cost no more than inferior ceilings—and you can get more money for jobs in which our Art Ceilings are used.

We'd like to send our handsome catalogue and special prices.

SHALL WE SEND THEM?

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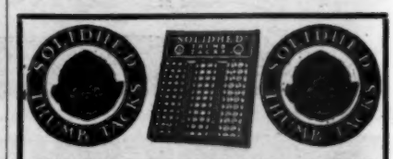

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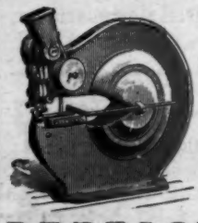

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Tools for Sheet Metals

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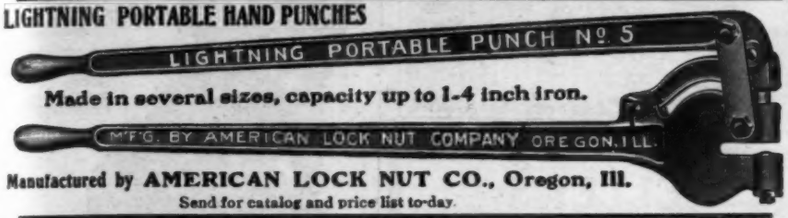

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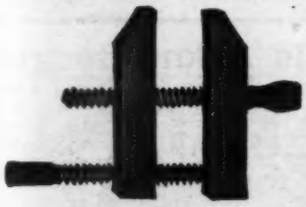

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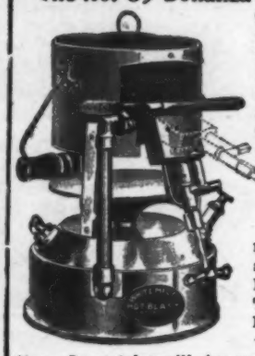

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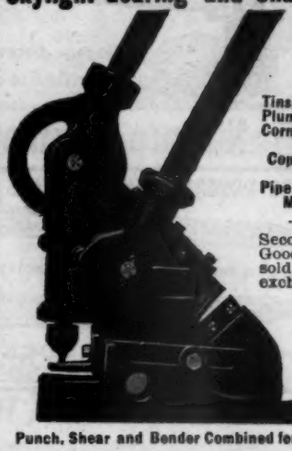

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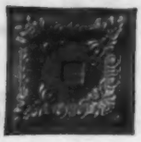

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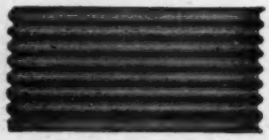

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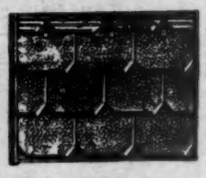

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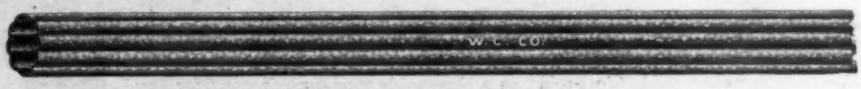

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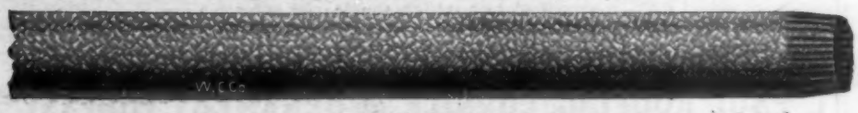

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to anyone for asking showing complete line of **TINNERS' AND ROOFERS' SUPPLIES.**

Large stock, great variety, prompt shipments. Get our prices.

BERGER BROS. CO., OFFICE AND STORE, 237 Arch St.; WAREROOMS, 100-02-04 Bread St.; FACTORY, 3114-16-18-20 N. 17th St., PHILADELPHIA.

We have a Hardware Delivery Wagon that you can Depend Upon.

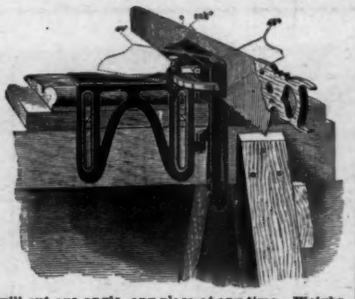
Body 20 in. from the ground; full width; regular heighth wheels, and yet will turn short.

Easy to Load and Unload.

Durability guaranteed. Complete catalogue on request. Mention this paper and address in full.

SYCAMORE WAGON WORKS
109 Edwards Street **SYCAMORE, ILL.**

ALWAYS READY FOR USE.
No. 159. MITRE BOX, SEAVEY'S IMPROVED



will cut any angle, any place at any time. Weighs only 2 pounds and retails for only $2.00. Ask your dealer or jobber for Seavey Mitre Boxes, or write us for Carpenters Green Book.

SMITH & HEMENWAY CO., 296 Broadway, N.Y.

REMOVAL NOTICE

On and after May 1st, we will remove to 108 and 110 Duane St., third building west side of Broadway, where larger and more commodious quarters have been secured, for the proper conduct of our large increase in business.

SMITH & HEMENWAY CO.
After May 1st, 108-110 Duane St.
NEW YORK CITY.

Vollkommer & Co.

Engineers and Contractors
1112 Empire Bldg. PITTSBURG, PA.

We Design and Completely Equip **Enameling Plants**
for Stamped Ware, Sign Work and Cast Iron Articles.

Stamping Plants

PETERS & HARVEY
MANTENO, ILL.

Write:
"You may discontinue our help wanted advertisement. We have received several replies and have engaged one of the applicants."

HOTCHKISS CLIPPERS

Standard Quality and Workmanship Guaranteed. Prompt Shipment. Prices Right.

Simple in Design. Elegant in Finish.

No. 350 B. B.

Send for Descriptive Catalogue and Prices.

EDWARD S. HOTCHKISS,
IRANISTAN AVE., BRIDGEPORT, CONN.

Clipper Lawn Mower Co., Dixon, Ill.

Manufacturers of Hand and Pony Mowers, also Marine Gasoline Engines from 2 to 8 horse power.

THE MOWER
That will kill all the weeds in your lawns.

If you keep the weeds cut so they do not go to seed, and cut your grass without breaking the small feeders or roots, the grass will become thick and the weeds will disappear. The Clipper will do it. If you wish Clippers, send in your orders.

THE 20TH CENTURY MAIL BOX

Constructed of No. 20 **Galvanized Steel** and **will not rust or break.**

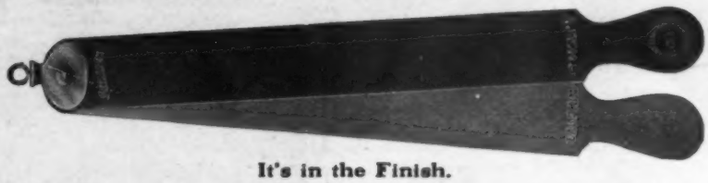
Is fitted with spring lock and two keys; also heavy glass panel and brass clip within for owner's name. Two springs outside to hold papers. Slot has spring-hinged cover, making it **absolutely rain-proof.** Painted with best aluminum bronze, like U. S. mail boxes. Size, inside 10 x 5½ x 2¾ inches.

Used for free delivery in cities only.

HEISE & BRAUER
63 Union Park Ct., Chicago, Ill.

HOMESEEKERS EXCURSIONS
On FIRST and THIRD TUESDAYS in each month to **VIRGINIA**
Via NORFOLK & WESTERN RAILWAY
For all information as to Rates and Tickets and for LAND PAMPHLETS and descriptive matter, address
ALLEN HULL, D. P. Agt., Columbus, Ohio

"THIS STROP SHARPENS THE RAZOR"



It's in the Finish.

Dealers interested **answer this "Ad"** and you will **receive** a **price list** and **samples** of the **Sealskin Swaty Strop.**

SEALSKIN SWATY STROP CO., HAW BUILDING, OTTUMWA, IOWA

You'll Be Surprised

at the demand there is for a really GOOD Post-Hole Auger if you take up the sale of the

Iwan Post-Hole AND Well Auger,

the most largely sold and the most prominently advertised earth auger on the market, our advertising reaching all classes of consumers who have use for a post-hole auger.

It takes a ***Large Variety of Sizes*** to satisfy so many consumers. We make the augers in 3, 4, 5, 6, 7, 8, 9, 10, 12 and 14-inch sizes. 16-inch size in preparation.

ORDER YOUR SPRING SUPPLY

from your Jobber NOW, and include ***Iwan Drain Cleaners, Ditching Spades*** and ***Post-Hole Diggers.*** Send for list of complete line.

IWAN BROTHERS, Manufacturers of Hardware Specialties, ***Streator, Ill.***

WE'VE "GOT THE PUNCH"

It's the Rogers Belt Punch.

One-half actual size.

Thousands sold daily to **Threshermen, Sawmill Men, users** of **Belted Machinery, Harness Makers** and **Farmers** everywhere. Can be **carried in the vest pocket.**

ALWAYS READY

Punches any size hole, from one-sixteenth to three-eighths of an inch—does it quickly and nicely.

Write us for **Special Price.** A postal card will bring it. The **Biggest Seller** on the market. **Big Profit.**

Address **THE SATTLEY STACKER COMPANY**
1317 State Life Bldg., Indianapolis, Indiana

THE IDEAL EPWORTH

THE IDEAL EPWORTH

Salesman Wanted
TO SEE
The Ideal Epworth Generator
The Best Lighting System.
NONE BETTER, SAFER EASIER TO SELL
The only cheap high grade Generator on the market. Write us.
The Ideal Epworth Acetylene Co.,
Waterloo, Iowa. Home Office, Johnstown, Pa.
Successors to Epworth Gas Light & Heating Co., Waterloo, Ia.

DO YOU WANT THE PAINT BUSINESS OF YOUR TOWN?

Every Up-to-Date and Progressive Hardware Merchant

should carry a reliable line of paints. We have a Special Proposition to make to you, if we have no agency in your town at the present time.

ESTABLISHED 1851
THE H AND M PAINTS
TRADE MARK ADOPTED 1903.

The Heath & Milligan Paints

are sold to but one dealer in each town and our best efforts and the entire force of our advertising system are used to back him up so that he will obtain a profitable and satisfactory business in the shortest possible time.

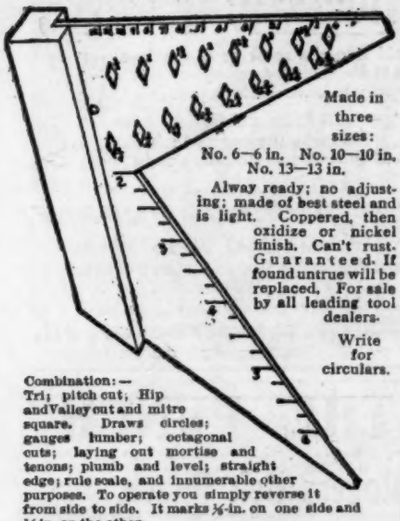
Write Today for Sample Shade Cards and Special Proposition to Dealers.

HEATH & MILLIGAN MFG. CO. Paint and Color Makers **CHICAGO, U. S. A.**

"Put a Little SUNSHINE in Your Home."

The New Universal Square

"NEW STYLE"



Made in three sizes: No. 6—6 in. No. 10—10 in. No. 13—13 in.

Alway ready; no adjusting; made of best steel and is light. Coppered, then oxidize or nickel finish. Can't rust. Guaranteed. If found untrue will be replaced. For sale by all leading tool dealers.

Write for circulars.

Combination:—Tri; pitch cut; Hip and Valley cut and mitre square. Draws circles; gauges lumber; octagonal cuts; laying out mortise and tenons; plumb and level; straight edge; rule scale, and innumerable other purposes. To operate you simply reverse it from side to side. It marks ½-in. on one side and ¾-in. on the other.

The Duby & Shinn Mfg. Co., Inc.
Office and Works: 34 E. 29th St.
NEW YORK CITY

Do you want to increase your business on White Lead?

Do you want to sell a White Lead which is not advertised by any Catalogue or Mail Order House?

Do you want to sell a White Lead that is BETTER than Strictly Pure White Lead?

Do you want to sell a White Lead which is put up in Steel Kegs?

Do you want to be the only dealer in your city to handle an article of this kind?

If so, write at once to

Enterprise Paint Mfg. Co.

Van Buren and Peoria Streets, Chicago

A Square Deal and A Square Meal

You get both if you buy "NEVER-BREAK" Steel Seamless Spiders, Griddles, Kettles, Etc.

The Safeguard against burning, scorching and spoiling even the most delicate foods.

Write for Catalogue

The Avery Stamping Co.
CLEVELAND, OHIO
Mfrs. "Never-Break" Goods.

Have you ever weighed up a wooden keg after emptying and figured how much oil had soaked into the wood?

None of this when

American Steel Lead Kegs

ARE USED.

American Can Company

New Yor Chicago San Francisco

Goodell-Pratt Company
GREENFIELD, MASS., U.S.A.
HACK SAWS
FAMOUS FOR TEMPER AND CUT
HAND AND MACHINE BLADES OF ALL STANDARD LENGTHS AND WEIGHTS
Catalogue Free

Gillette Safety Razor

NO HONING NO STROPPING

The Most Wonderful Selling Razor in the World

IT PLEASES EVERY PATRON, WHO, IN TURN, BRINGS A NEW CUSTOMER.

"THE GILLETTE" sales are permanent, it turns orders to money and profits.

"THE GILLETTE" blade is of fine, flexible, wafer steel that shaves. 20 to 40 quick and comfortable shaves from each blade.

12 Blades, 24 Keen Edges

Triple silver-plated set with 12 blades,	$ 5.00
Quadruple gold-plated set with 12 blades,	10.00
Quadruple gold-plated set with 12 blades and monogram,	12.00
Standard combination set with shaving brush and soap in triple silver-plated holders,	7.50
Other combination sets in silver and gold up to	50.00

Standard packages of 10 blades with 20 sharp edges, for sale by all dealers, at the uniform price of 50 cents.

No Blades Exchanged or Resharpened

We supply our dealers liberally with signs, booklets and hangers. Write for our uniform discounts and facts.

GILLETTE SALES COMPANY
TIMES BLDG., NEW YORK CITY

STERLING

STERLING POWER HACK SAW MACHINES AND BLADES REPRESENT STERLING VALUE AND SERVICE ARE BEST BY TEST
DIAMOND SAW & STAMPING WORKS
BUFFALO, N.Y., U.S.A.

STERLING STERLING STERLING

The Fulton Hardware Co., Portland, Ind., write:

"Please discontinue our want ads for tinner and plumber, as we have received more replies than we can take care of at present."

A Few Reasons Why You Should Have

THE HERRICK REFRIGERATOR

WATERLOO, IOWA

They are **built on "honor," best workmanship, material** and **finish. Solid oak cases,** even in the smallest sizes. **Highest quality** throughout, at **reasonable prices.** All walls and doors **guaranteed packed** with **solid Mineral Wool** insulations to cover **double** the usual **thickness. Saves ice. Economical** in **operation.** Has an absolute **DRY AIR SYSTEM** of Refrigeration of **Highest MERIT, Perfect Circulation. No dampness** or metal linings to breed and hold disease germs and foul odors. You get **value received** when you purchase the **HERRICK.** Odors and gases from foods immediately removed from interior by **superior system. Seamless pans. Non-rusting. No leaking. Large storage capacity. Removable trap** and drain pipe. Sanitary in actual operation as well as in construction. **No mould—No taint. Durability.** Latest improvements. Built to last a lifetime.

High Grade Refrigerators at prices that will interest you.

WRITE FOR CATALOG. Do not delay if you wish the best.

HERRICK REFRIGERATOR CO.
Factory, WATERLOO, IOWA.

Pointing and Brick Layers' Trowels

The blades are made of best spring steel, the shank of the best air furnace malleable iron. Hardwood, well polished, forms the handle. Our household cleavers are a necessary line in every hardware store. They sell easily and they pay well. We make a large assortment of Builders' Hardware and have the largest and best equipped hinge factory in the world.

Bricklayers' Trowel

Hinges, Butts, Shelf Brackets Door Bolts

WRITE FOR CATALOG

GRIFFIN MFG. CO., :: Erie, Pa.

STEWART IRON FENCE

Agents Wanted

Hardware Dealers Make Big Profits Selling Stewarts FAMOUS IRON FENCE

For Residences, Churches, School Houses, Etc.

Cemetery Lot Enclosures a Specialty

Artistic Entrance Gates

Park & Cemetery Arches

Iron Reservoir Vases, Lawn Settees, Iron Guards, Hitch Posts, Fountains, Etc.

WRITE FOR CATALOGUE No. 23 TO-DAY

THE STEWART IRON WORKS COMP'Y
CINCINNATI, OHIO, U. S. A.

NEW YORK CLIPPER

IS THE GREATEST THEATRICAL & SHOW PAPER IN THE WORLD.

$4.00 Per Year. Single Copy, 10 Cts.

ISSUED WEEKLY.

SAMPLE COPY FREE.

FRANK QUEEN PUB. CO. (Ltd), PUBLISHERS, 47 W. 28TH ST., NEW YORK.

ALBERT J. BORIE, MANAGER.

Get Ready to Sell Spading Forks.

From flower-garden to farm, wherever ground is broken, one of the most useful and handiest tools is the **Spading Fork.** It's the most generally sold—nearly everybody wants one.

We manufacture every style that is good—light and heavy; large and small; flat and angular tines; common and strap ferrules; polished and natural finish; Ash handles, all sizes; Wood D, Malleable D and 4 ft.—for every kind of soil.

Show a wide variety and plenty of them this spring—they will be *money makers* for you.

Glad to write you fully. Order from your jobber.

AMERICAN FORK & HOE CO.
CLEVELAND, O.

Stay-In Flue Stoppers

Brass finished. Nicely decorated. Cannot be jarred or blown from flue hole. Guaranteed to be soot proof.

Perfection Cake Mixer

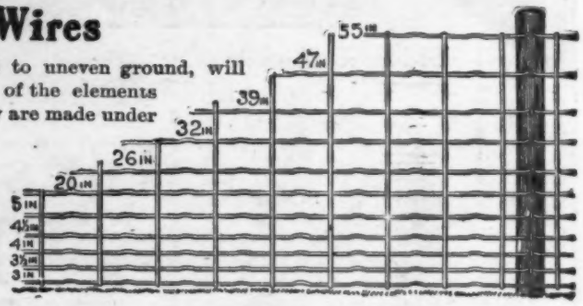
Made of No. 16 steel. It's one of the best articles on the market. Almost everybody thinks so.

STUBER & KUCK, Peoria, Ill.

Manufacturers of Pieced Tinware and all styles of Flour Sifters.

"Pittsburgh Perfect" Fences

All Galvanized Steel Wires



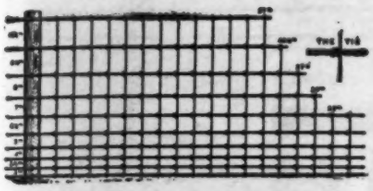
Are durable, strong and adjustable. They can be adjusted to uneven ground, will curb in the strongest beast and will withstand the attacks of the elements longer and surer than any other fence on the market. They are made under the same favorable conditions and as carefully as all the

"Pittsburgh Perfect" Brands

of Wire Rods, Annealed, Bright and Galvanized Smooth Wire, Barb Wire, Twisted Cable Wire, Fence Staples, Wire Nails, Steel Hoops, Bands and Cotton Ties. Dealers can sell goods readily which are MANUFACTURED BY

The Pittsburgh Steel Co., Pittsburgh, Pa.

The Fence That Suits



Your Customer

Is the one for you to handle

Woven Field Fencing

Both Single and Double Strand.

JUMBO POULTRY turns everything. Lighter Poultry for less money of Various Weights.

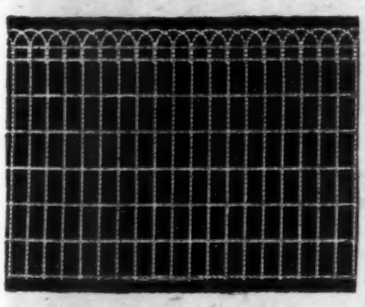
Lawn and Cemetery Fence, Barb Wire, etc.

SEND FOR CATALOGUE.

THE DENNING WIRE & FENCE CO.

CEDAR RAPIDS, - IOWA

"Fences that Sell"



This is a good one; we have others. Many dealers handling. We want more.

We also manufacture Field Fence, Wire Gates.

CYCLONE FENCE CO.

Dept. 10 Waukegan, Ill.

HIGH-GRADE BUGGIES

$47.50 AND UP. Dealers Only.

Strictly First-Class Material

JAMES & MEYER BUGGY CO.

Write for Catalog and Prices. Lawrenceburg, Ind.

"Yankee" Tools

ARE THE NEWEST, CLEVEREST AND QUICKEST SELLING, and are without equal in quality or efficiency in practical use.

No. 10 and 11—Ratchet, Right and Left Hand and Rigid

No. 15—Ratchet, With Finger Turn on Blade

No. 30 and 31—Spiral Ratchet, Right and Left Hand and Rigid

No. 40-41-44—Automatic Drill

No. 50—Reciprocating Drill for Wood or Metals

Send for "Yankee" Tool Book

North Bros. Mfg. Co., Philadelphia

SPERRY'S CALDRONS

Twelve sizes always in stock.

Full measure, guaranteed perfect, original patterns, with metal distributed where it is needed. Many Caldrons are made from our casting as patterns. They are inferior to originals, as they have light bottoms and heavy sides and hold less.

D. R. SPERRY & CO. HOLLOW-WARE FOUNDERS **Batavia, Ill.**

Martin Timmer, Knox, No. Dak., writes:

"Please stop my 'ad' (situation wanted) in your paper, as I have had dozens of letters in reply and have found the position I wanted."

A Grade Better Than The Best

New Features.

Way ahead of them all.

Packed in Counter Display Boxes.

A fixed retail price.

Has eye to hold Trouser Hanger

"Pullman" Folding Coat Hangers

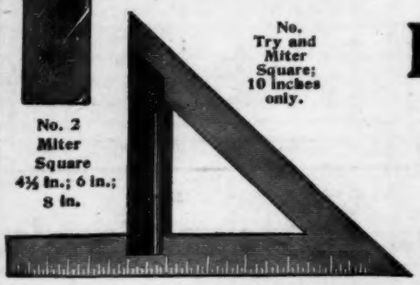
Prepare for the demand

Pullman Mfg. Co., Rochester, N. Y., U.S.A.

Retailers!

Order a Sample Lot from your Jobber.

Try Square No. 5 with Gauge Edge, 6 inch only.

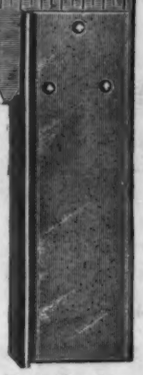


No. Try and Miter Square; 10 inches only.

No. 2 Miter Square 4½ in.; 6 in.; 8 in.

Fox's N. P. All Steel TOOLS

LIGHT, DURABLE and SQUARE INSIDE and OUT



Fox's Try Square No. 1 without Gauge Edge; 3 in.; 4½ in.; 6 in.; 8 inch.; 10 in.

ALL ARE ACCURATE AND CAN BE SOLD AT A POPULAR PRICE

Magic Pattern Rule

Will Lay Out Patterns

for any size and angle of elbows in three minutes' time. Can also be used as Straight-edge Rule, Circumference Rule and Trammel. Should be in every Tinshop. Will save its cost in a few weeks. Thousands are in use and every one giving excellent satisfaction.

Price, complete in a nice wooden box with Chart, $4.00 net cash.

LUFKIN RULE CO., Saginaw, Mich.

(Mention THE AMERICAN ARTISAN.)

No. 5, $4.00 Each

We are producing this Level to give users all the advantages of a full brass bound level at a nominal price. The stock is very choice selected cherry, corners are heavy, tips cast, and especially hard, to stand wear.

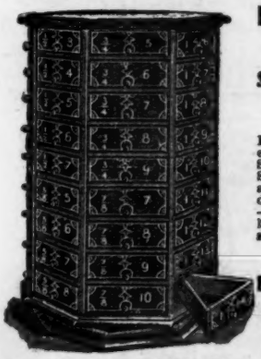
A beautiful Level, polished and strictly first class. Packed one in a box, and six in a case. Any dealer can handle a case very quickly. Write for discount.

THE BAKER-McMILLEN CO., AKRON, OHIO, U. S. A.

TANLEY RULE AND LEVEL CO.

IMPROVED CARPENTERS' TOOLS

Sold by All Hardware Dealers **NEW BRITAIN, CONN.**



Bolt and Screw Cases

SAVE TIME and MONEY

A necessity for Hardware Dealers, Machine Shops, Pattern Shops and in fact anyone who handles small articles—last indefinitely. Send for descriptive booklet.

AMERICAN BOLT & SCREW CASE CO. Dayton, Ohio, U. S. A.

The Best Floor Spring Hinges are the best for you to sell. Cheap Hinges always come home to roost.

MATCHLESS Ball-Bearing Floor Spring Hinges are made to sell—*and to stay sold.*

The Ball-Bearings insure easy, noiseless motion,—the Spring gives the power, and never wears out or break

Don't hesitate to send for our prices!

Address Dept. A.

LAWSON MFG. CO. 40 Dearborn St., CHICAGO 101 Reade St., NEW YORK

H. A. Goold, Hiawatha, Kans., writes April 3, 1904: "You may discontinue my ad, as I have had so many answers that I was surprised. Your paper is well worth the subscription price, and I cannot see how any tinner wants to get along without it."

ELEVATORS

Improved Quick and Easy Rising Steam, Electric and Hand Power

Send for circulars

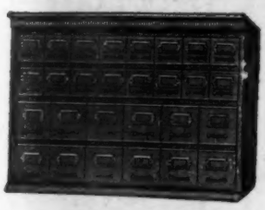
KIMBALL BROS. CO.
1031 Ninth St., COUNCIL BLUFFS, IA.
KIMBALL ELEVATOR CO., 129 Vincent St., CLEVELAND, O.

C. N. HOOPER, Dubuque, Iowa.

VITREOUS ENAMELING
TECHNOLOGIST

Designs, builds and starts new plants. Improves quality and reduces the costs in those already established.

Steel Hardware Shelf Boxes



Screw Cases, Etc.

Send for Circulars.

HELLER CO., Montclair, N. J.
or GEO. W. HEILAND, 213 Washington St., Chicago, Ill

Yale Locks

The need of locks may not be a credit to civilization but a Yale lock is a credit to him who uses it and to him *who sells it.*

The genuine Yale lock always has the trade mark

YALE

on the cylinder as shown above. That name is a guarantee of quality in material and workmanship as well as of the latest ideas in lock construction.

Hardware dealers should write for our No. 18 Catalog which lists our more active goods.

Yale & Towne Mfg. Co.
9 Murray St., New York
Chicago Office: 90 Lake Street

THE AMERICAN ARTISAN Keeps You Posted.

YOUR CUSTOMERS WANT TO BUY
A PURE SOFT COPPER CABLE LIGHTNING ROD

You want to sell the best—MOORE BROS., Cable fills the bill, protection guaranteed, endorsed by Ins. Co., chemically pure copper—get the agency at once—a postal will bring you full particulars. :: Write for our catalogue, price list, etc.

MOORE BROS. LIGHTNING ROD CO.
GRAHAM — MISSOURI

WE MANUFACTURE

LIGHTNING CONDUCTORS

WITH

Automatic Water Supply

FOR THE

GROUND RODS

(PATENTED APRIL 30, 1895)

The ground rod is the most important part of the rod. Sometimes the ground is perfectly dry, and the deeper the harder the ground is in some localities. By our invention you can be sure of two feet or more of water all the time in the rod and moist earth around the point in the ground. It is made of ¾-inch pure copper tube. We want to furnish it to a responsible dealer in every town or city in the United States.

We manufacture Weather Vanes of all kinds. They can be used with or without lightning rods.

Write for Catalogue **40 Pages Free**

The Security Lightning Rod Co.
BURLINGTON, WIS.

Lightning Rods are a Protection

when you use our

PURE COPPER CABLE

If it wasn't why do we give a $500.00 guarantee bond that the building will not get damaged from lightning if our Copper Cable is used. We have got the best and heaviest Cable and Fixtures on the market, and our prices are far below any other firm now making an inferior cable. Our Points are large, heavy bayonet, made of pure copper; we do not use the light shell point, so as to get our goods on the market cheap. There is money in the business for you, and the parties that get the agency for our goods are the ones that will make the money this year. We want an agency in every county, send for catalog and prices to

MAHER & SON, Preston, Ia.
The firm that cut down the price of Lightning Rods.

Automobile Cycle Skate

Our Newest Model. One Size Extension, 10 to 12 in.

Ball bearings, 5-in. rubber-tired wheels, metal parts sheet steel, finely nickel-plated. Retail $10 per pair; with 4-in. wheel, $7.50 per pair.

Every dealer in Hardware, Sporting Goods, etc., will find it profitable to sell our line of Cycle Skates, as they appeal to both young and old, being adapted for use in skating rinks or on smooth sidewalks. Write for catalogue and trade discounts.

CYCLE SKATE AND SPORTING GOODS COMPANY,
37 Park Street, New York

Holstein Pattern

Guernsey Pattern

SOME MILK CANS

will please part of the people part of the time, but the cans that please all the people all the time are

Sturges Milk Cans

Made in an independent factory and sold at Anti-Trust Prices. We make low priced cans and we make high priced cans, but, high or low, **we make nothing but a good can.**

Why? It is not necessary to go far to ascertain the reason for the universal acknowledgment that our cans are **the best.** The best quality steel plate, tinned and retinned in our own shops, most skillful and highest paid labor, combined with such patented improvements as the one piece Round Handle, Seamless Neck, Seamless Sanitary Cover, etc., tell the story.

25 CENTS

can be saved by the manufacturer in the cost of a milk can, if so inclined, in the item of solder alone, and in the method of using it. By long years of practice our expert employes have acquired the art of soldering an inside seam as smooth as glass. To do this they must use solder and plenty of it. It takes experts to make a good can and we have them.

Write us for **Catalog No. 75.**

STURGES & BURN MFG. CO.,

Harrison and Green Sts. Chicago.

The Gem Pattern

Omega Pattern

Here

The secret of big sales is to show the right thing at the right time.

HERE are two things housekeepers are thinking about buying **now** — Cherry Stoners and Fruit Presses.

Other things are Lawn Sprinklers and Ice Shredders.

All of which to be right, must be

"ENTERPRISE"

"ENTERPRISE" FOOD CHOPPERS SELL ALL THE TIME

Write for free copies of our newest booklet, "The Cook, Her Critic and—." If you give them away they will make sales for you.

The Enterprise Mfg. Co. of Pa.,

PHILADELPHIA, U. S. A.

AGATE NICKEL-STEEL WARE

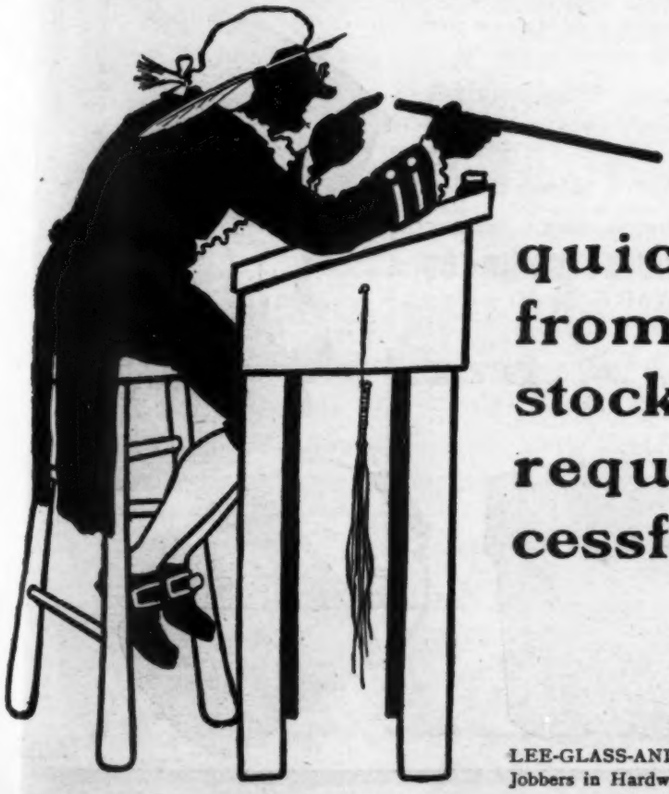
AGATE L&G Mfg. Co. NICKEL-STEEL-WARE

Is absolutely free from poisonous substance, is made by careful, experienced men, by a company founded in 1850. The first enameled ware and blue and white ware made in this country was made in our mills. We know how to make enameled ware safe and durable. We make it safe and durable because we are proud of the trade mark. Look for the blue label.

Lalance & Grosjean Mfg. Co.

CHICAGO, NEW YORK BOSTON

You Can't Learn It Too Quickly



An honest count, honest goods and quick shipments from an immense stock are the first requisites of successful retailing.

LEE-GLASS-ANDREESEN HDW. CO.
Jobbers in Hardware OMAHA

REED'S Flintstone Enameled Steel Ware

Has Trebled Its Sales

within a year. Its sale has been so phenomenal because it is just what every thrifty housewife wants and needs.

Flintstone is light, artistic, seamless, sanitary and durable.

It is the best moderate priced Enameled Steel Ware on the market.

The chemicals used in its manufacture are imported from Germany and Austria in a raw state, which gives Flintstone the advantage over imported wares.

Ten Years' Guarantee

is given with every piece of Flintstone. It is such an attractive seller that one pleased customer begets another.

If you "want to be near the bandwagon" to hear the music—the jingle of profits from Flintstone, write to-day to

REED MANUFACTURING CO.
NEWARK, N. Y.

BRANCH OFFICES

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CHICAGO OFFICE: No. 223 W. Twelth St.; Telephone, Monroe 1411.
CINCINNATI OFFICE: No. 11 East 2nd Street.
ST. LOUIS OFFICE: 118 North 3rd Street.

LEADS 'EM ALL!

The White Lily Washer is used so extensively because of its **High Speed** and **Simple Gearing**: — while it **Suds with little exertion.** :: ::

Dealers pronounce it a **Grand Seller**, and **Users** say they **could not do without it.**

Write for Our Exclusive Agency

WHITE LILY WASHER CO., DAVENPORT, IOWA

Write Us

and tell us if you are handling the

O.K.
Washing Machine

The washing machine that's advertised in all the leading farm journals.

We want to refer inquiries to you.

H. F. BRAMMER MFG. CO.
Dept. B, Davenport, Iowa

Have you seen the

SNOW WHITE

The latest and finest Creation in a washing machine to date?

Ask your jobber or write us.

BENBOW-BRAMMER MFG. CO., ST. LOUIS, MO.

The Pioneer Washing Machine Manufacturers.

GEROCK BROS. MFG. CO.
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Detail Work a Specialty. **Ask for Catalogue**

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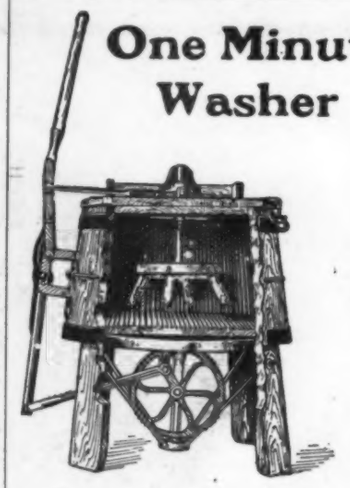
One Minute Washer



We want one exclusive Hardware Merchant as Agent in each town in Nebraska and the Black Hills.

Paxton & Gallagher Co.
Omaha, Neb.

Smith's Latest Improved Double Lock Nested Stove Pipe

FIG. 2

Construction of which is very simple, practical and just as safe as riveted pipe. Can be cut when fractional joint is required, without the use of a rivet. Guaranteed to fit perfectly.

Fig. 2 Cut shows pipe as it is being closed.

Write for free model, showing how it locks automatically without the use of tools of any kind.

The OHIO STOVE PIPE & MFG. CO.
NEW PHILADELPHIA, OHIO

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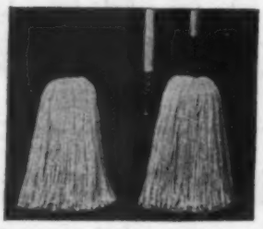
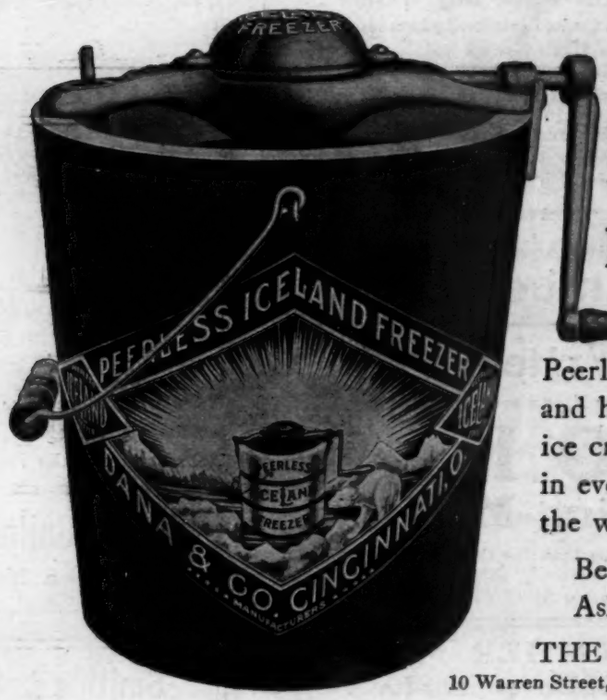
Eagle Mop Wringers and Ohio Detachable Mop Heads and Handles

Meet every service demanded of them. WHY?
Because they are built upon the correct principles. They have been hailed with delight by users, and the universal verdict is, I WANT NO OTHER. Ask your jobber or write us direct. A catalogue for the asking.

Eagle Cooperage Works, Sole Mfrs., Circleville, O.





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Ask your jobber.

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At the annual championship tournament of the Indoor .22 Caliber Rifle League of the United States, held at Grand Rapids, Mich., February 12-17, 1906,

PETERS CARTRIDGES

ESTABLISHED THE WORLD'S RECORD.

2481 OUT OF A POSSIBLE MADE BY W. A. TEWES **2500**

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At Zettler Rifle Club Open Tournament, New York, March 10-17, 1906, 100-Shot Match won by Arthur Hubalek, score 2468. Seven of the first ten prize winners used PETERS .22 SHORT CARTRIDGES.
Zimmermann Trophy won by L. P. Ittel. Best Bullseye made by W. Rosenbaum. L. C. Buss and L. P. Ittel made the possible 225 on the Ring Target.

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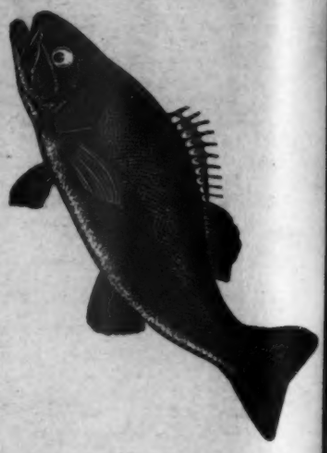

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The only single cut-off made to fit CORRUGATED and Plain pipe and which can be used without extra pipe or elbows.
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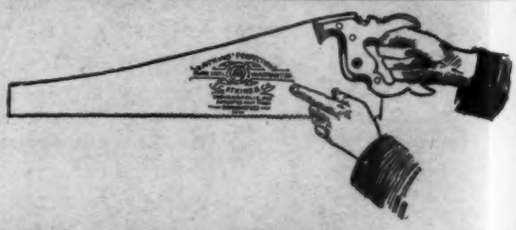
This is the Saw



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